PB80-214240

Government and University Oil Shale Directory

Denver Research Inst., CO

Prepared for

Environmental Protection Agency
Washington, DC

Mar 80

U.S. Department of Commerce
National Technical Information Service
NTIS

DOE

EPA

United States
Department of
Energy

Office of Resource
Applications
Washington DC 20585

DOE Report No. RA-0046

PB80-214240

United States
Environmental Protection
Agency

Office of Research
and Development
Washington DC 20460

EPA-600/9-80-023a
June 1980

Research and Development

Government and University Oil Shale Directory

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

RESEARCH REPORTING SERIES

Research reports of the Office of Research and Development, U.S. Environmental Protection Agency, have been grouped into nine series. These nine broad categories were established to facilitate further development and application of environmental technology. Elimination of traditional grouping was consciously planned to foster technology transfer and a maximum interface in related fields. The nine series are:

1. Environmental Health Effects Research
2. Environmental Protection Technology
3. Ecological Research
4. Environmental Monitoring
5. Socioeconomic Environmental Studies
6. Scientific and Technical Assessment Reports (STAR)
7. Interagency Energy-Environment Research and Development
8. "Special" Reports
9. Miscellaneous Reports

This document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO.
EPA-600/9-80-023a

2\.

3. RECIPIENT'S ACCESSION NO.
PB 80 214240

4. TITLE AND SUBTITLE
Government and University Oil Shale Directory

5. REPORT DATE
March 1980

6. PERFORMING ORGANIZATION CODE

7. AUTHOR(S)
Denver Research Institute, Denver CO
W.N.McCarthy, Jr. (EPA) & N.Lailas (DOE), Editors

8. PERFORMING ORGANIZATION REPORT NO.

9. PERFORMING ORGANIZATION NAME AND ADDRESS
Denver Research Institute
University of Denver
Denver, CO 80208

10. PROGRAM ELEMENT NO.

11. CONTRACT/GRANT NO.
R807202-01-0

12. SPONSORING AGENCY NAME AND ADDRESS
USEPA
ORD/OEET
Washington, DC 20460

USDOE
Off. of Resource Applications
Washington, DC 20585

13. TYPE OF REPORT AND PERIOD COVERED
Final

14. SPONSORING AGENCY CODE
EPA/ORD/ 17

15. SUPPLEMENTARY NOTES

16. ABSTRACT

This directory lists all people in government (federal, state and local) and universities involved in scientific, engineering and management activities related to oil shale. The directory is divided into the following major sections:

Glossary of Abbreviations
Areas of Activity Index
Organization Index
Committee Index
Location Index
Publications Directory
Federal, State and University Directory
Local Government Directory

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Oil Shale		8H 97A 97F

18. DISTRIBUTION STATEMENT Release to Public	19. SECURITY CLASS *(This Report)* Unclassified	21. NO. OF PAGES
	20. SECURITY CLASS *(This page)* Unclassified	22. PRICE

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

DOE Report No. RA-0046

GOVERNMENT AND UNIVERSITY OIL SHALE DIRECTORY

March 1980

edited by
William N. McCarthy, Jr.
U.S. Environmental Protection Agency
Nicholas Lailas
U.S. Department of Energy
Washington, D.C.

prepared by
Denver Research Institute
University of Denver
Denver, Colorado

DISCLAIMER

This report has been reviewed by the Office of Research and Development, U.S. Environmental Protection Agency, and the Office of Resource Applications, U.S. Department of Energy, and approved for publication. Approval does not signify that the information contained in this directory is necessarily complete or correct.

PREFACE

The task of preparing this directory was undertaken for two reasons:

1. To identify the scientists, engineers and managers in government and universities who are currently involved in activities relating to oil shale.

2. To provide a mechanism to encourage communication between individuals in government and universities who are working in oil shale research, engineering and management.

In the last few years, interest in tapping this nation's vast oil shale resources has been growing steadily as the need for enhanced domestic supplies of energy becomes critical. The President, in his energy message (July 16, 1979), emphasized the importance of oil shale in his proposals for reducing dependence on foreign oil. Several major pieces of energy legislation are now under consideration by Congress, one of which calls for creation of an Energy Security Corporation to oversee and provide financial incentives for the establishment of a synthetic fuels industry by 1990.

Production of oil from shale in commercial quantities may become a reality in this decade. The number of people working towards this important goal has grown dramatically in all sectors of society. The Editors hope this directory will will be a valuable means of encouraging broad and productive communication between all who are working to create a successful oil shale industry.

The first effort to produce any directory is difficult. Further directories of this nature are planned on a yearly basis. It is our intention that the next directory will include managers, engineers and scientists from the private sector. We hope that this directory proves to be useful. Suggestions for the improvement of future directories would be appreciated and may be easily accomplished via the mailer at the back of this directory. Individuals from the private sector who wish to be in the directory next year are also encouraged to fill out the enclosed mailer.

ABSTRACT

This directory lists all people in government (federal, state and local) and universities involved in scientific, engineering amd management activities related to oil shale. The directory is divided into the following major sections:

- Glossary of Abbreviations
- Areas of Activity Index
- Organization Index
- Committee Index
- Location Index
- Publications Directory
- Federal, State and University Directory
- Local Government Directory

CONTENTS

Page

Preface iii

Abstract iv

Acknowledgment vi

I. Introduction 1

1.0 Overview 1

2.0 Purpose of the Directory 1

3.0 How the Directory was Compiled 1

4.0 Structure and Use of the Directory 2

5.0 The Structure of the Local Government in Response to Oil Shale Development . . 6

II. Summary and Conclusions 7

Glossary of Abbreviations G-1-3

Areas of Activity Index A-1-31

Organization Index O-1-8

Committee Index C-1-5

Location Index L-1-6

Publications Directory P-1-35

Federal, State and University Directory D-1-48

Local Government Directory LD-1-6

ACKNOWLEDGMENT

The Editors are most grateful for the enthusiastic cooperation and support shown by the many people who are listed in this directory. The difficult tasks of identifying the people involved in oil shale, unraveling a confusing assortment of committees and obtaining seemingly endless lists of publications, in particular, could not have been accomplished at all without the help given us so willingly along the way. We wish to thank Robert Demos, Colorado West Area Council of Governments and Duane Rheberg, Rio Blanco County, for their help in compiling the information on local government in Colorado. We also wish to acknowledge the tireless devotion of the survey team at the Denver Research Institute (DRI) who helped in collecting the information, and the staff of the DRI Word Processing Center who expertly molded this information into a directory.

I. INTRODUCTION

1.0 OVERVIEW

This directory represents the first attempt to compile a comprehensive list of the managers, engineers and scientists from government and universities engaged in the research, development, commercialization and regulatory activities involving oil shale. Commercial development of oil shale has seemed to be imminent several times over the last 25 years, but economic uncertainties have always thwarted industrialization plans. Today, large increases in the real price of energy, a pressing need for increased domestic supplies of energy, and supportive government policies finally appear to have overcome the uncertainties of the past. Consequently, the number of people involved in oil shale, in all segments of society, has suddenly increased significantly. There is a need to facilitate communication between people involved in oil shale activities.

2.0 PURPOSE OF THE DIRECTORY

The task of preparing this directory was undertaken for two reasons:

1. To identify the scientists, engineers and managers in government and universities who are currently involved in activities relating to oil shale.
2. To provide a mechanism to encourage communication between individuals in government and universities who are working in oil shale research, engineering, management and regulation.

Now that the task of compiling the directory has been completed, it appears likely that ancillary purposes may be served as well. For example, major research efforts were required to unravel a confusing assortment of Federal Government committees. Now, for the first time, a complete picture of this aspect of the Federal Government's response to the development of oil shale is available.

Similarly, a well organized, broad based local government structure was discovered which should give the individuals who actually live in the resource area an effective voice in future development plans. This grass roots response is unique and important. Hence, it is covered as a special topic in Section 5.0 of this directory.

This directory gives only a "snapshot" of the managers, engineers and scientists involved in oil shale (March, 1 1980). The current rate of change is so rapid that this picture will be accurate for only a brief period of time. During the one and one-half months of intense surveying for this directory, several major, Federal Government committees were created which are already involved in the formulation of important national policies. Likewise, other committees were disbanded. Many managers, engineers and scientists found themselves so suddenly pulled into in oil shale related activities that in some instances they were unable to state with any certainty where they worked within their agency.

The criteria which qualify a manager, engineer or scientist are:

- o That individual must have a bonafide involvement in some aspect of the current oil shale activities.
- o That individual must work for the government (federal, state or local) or a university.

They may be simply administrators over people involved in oil shale, or new members of a committee.

3.0 HOW THE DIRECTORY WAS COMPILED

A multiphased research effort was adopted to compile this directory. A mail survey was used as the first step in the approach. Questionnaires were sent to a list of managers, engineers and scientists who had attended symposia on oil shale in the last year. The response to the survey was poor and the information was incomplete, but a beginning was made in identifying agencies and individuals involved in oil shale.

Next, an extensive phone survey was launched. Managers, engineers and scientists who responded to the mail survey were called. Each individual was asked for additional names, and asked to identify oil shale committees and their chairmen. Each identified chairman (or important committee members where no chairman was found) was asked for the proper and complete name of the committee and a complete membership list. Each qualified committee member was then called and interviewed. As the phone survey progressed, more names were obtained from the managers, engineers and scientists contacted. On a continuing basis, these names were checked against a master list. The end of this phase of the survey was assumed to be complete when no new names were volunteered.

Every attempt was made to contact every manager, engineer and scientist on the master list. It was necessary to call many individuals a number of times before actual contact was made. Sometimes contact was never made, but associates supplied the necessary information. A small number of individuals are not listed in the directory because they could not be reached even after repeated attempts. These omissions are regrettable because these managers, engineers or scientists may have significant involvements in oil shale.

4.0 STRUCTURE AND USE OF THE DIRECTORY

This directory contains a number of specialized sections in addition to a general listing of names, addresses and phone numbers. These specialized sections are designed to increase the usefulness of the document. The directory is divided into the following sections:

- Glossary of Organizational Abbreviations
- Areas of Activity Index
- Organization Index
- Committee Index
- Location Index
- Publications Directory
- Federal, State and University Directory
- Local Government Directory

Each of these sections is described below.

4.1 GLOSSARY OF ORGANIZATIONAL ABBREVIATIONS

Abbreviations have been made for all organizations listed in this directory. Because a very large number of managers, engineers and scientists and organizations are listed in the various sections of the directory, abbreviations were found to be necessary to keep the document from becoming unreasonably lengthy. An attempt has been made to use recognizable abbreviations, where possible, and to convey as much information as possible in a limited space.

In general, the abbreviations used for large Federal agencies contain two parts. The first part names the agency, and the second part identifies an office, branch, division or subpart of that agency. For example:

Organization	Abbreviation
U.S. Department of Energy Office of Shale Resource Applications	USDOE/RA
U.S. Environmental Protection Agency Office of Air Quality Planning and Standards	USEPA/OAQPS

Exceptions were made to the above rules when the abbreviation for the subdivision of an agency was more recognizable without the further specification of the agency. For example:

Organization	Abbreviation
U.S. Department of Interior U.S. Geological Survey	USGS
Congress of the United States Office of Technology Assessment	OTA

All abbreviations used in the directory are listed in alphabetical order in the Glossary.

4.2 AREAS OF ACTIVITY INDEX

An indexing system was devised in an attempt to provide a means for identifying managers, engineers and scientists working in specific areas. For example, if a user of the directory is interested in obtaining information on who is involved in studying the socioeconomic impacts of oil shale development, the user may look under the heading "Socioeconomics" in the Activity Index and find a listing of all individuals working in the area.

A manager, engineer or scientist may be listed under more than one heading in the activity index, and, by design, almost all individuals are. Such cross-referencing gives the user, in most cases, more than one way to locate the appropriate personnel. For example, if a user needs to find a manager, engineer or scientist who can provide information on the environmental impacts of oil shale plant effluents, (water emissions) he or she should look under the Activity Index heading: WATER, Impact Assessment. The individual whom the user is trying to find should also be familiar with the effluents from an oil shale plant and would, most likely, also be listed under: WATER, Effluents; and hence, could be identified in a second way.

By doing some cross checking, the user may also find people working in specialized areas.

For example, a user may wish to talk to someone working on the economics of shale oil refining who also works for the U.S. Department of Energy. This user would make lists of all Department of Energy personnel under the activity index headings: PROCESSING, Refining; and PROCESSING, Economics. Any managers, engineers and scientists who appear under both headings are likely to be familiar with the economics of shale oil refining.

All of the Activity Index headings are shown in Figure 4-1 (Page 4) in the order in which they actually occur in the index. Even from the beginning of this publication effort, it was apparent that far more managers, engineers and scientists in government and universities are involved in environmental activities related to oil shale than any other areas. For this reason headings which relate to environmental activities are particularly abundant in the index.

In general, the index satisfactorily categorizes the activities of most managers, engineers and scientists involved in oil shale. However, within a particular listing, the degree of expertise will vary from individual to individual and variations of approach and intent can be found within a single activity.

It is inevitable that a few individuals should fall in areas not concisely described by the index. For example, a manager, engineer or scientist may be working on developing a laboratory bioassay for the effect of oil shale effluents on fresh water biota. Such an individual would be listed as follows: WATER, Effluents; WATER, Monitoring; WATER, Impact Assessment; HEALTH EFFECTS, Emissions & Wastes; ENVIRONMENT-OTHER, Ecology & Wildlife.

Under each index heading managers, engineers and scientists are first assigned into one of four groups: Federal, State, Local and University. Within each group, listings are in alphabetical order, last name first. An organizational abbreviation accompanies each name.

Index headings appear in a logical rather than alphabetical order. For example, the following order is always maintained: AIR, WATER, SOLID WASTE. These three major headings also have subheadings which are the same and in the same order: Monitoring, Chemical Analysis, Pollution Control, Impact Assessment, and Permits & Regulation. The "Permits & Regulation" subheading is intended as a cross index to the "REGULATION" major heading. The major heading "LOCAL GOVERNMENT" has been used to highlight this important group of managers, engineers and scientists who would be difficult to identify if they were simply scattered throughout the rest of the index.

A brief description of each major heading in the index follows.

MANAGEMENT

This category has been used to index top level management individuals who are involved in oil shale through their management of other oil shale personnel. For example, an important project officer who manages several oil shale research projects would not be listed here, but his division head, laboratory director, etc. would be. Individuals listed under "MANAGEMENT" should be able to give overall management perspectives on the subjects listed, although they themselves may not be directly involved in oil shale. Those managers who are directly involved are also listed elsewhere.

PROCESSING

The managers, engineers and scientists involved in this activity area are primarily concerned with producing products (oil, gas, nahcolite, etc.) from oil shale, and they are not concerned directly with environmental effects. Processing activities have been divided into four categories: Oil Recovery, Mining, Refining, and By-Products. These categories are further divided into five specialties: Design, Economics, Geology, Resource Characterization, and Chemical Analysis.

AIR, WATER, SOLID WASTE

These three activities are of primary environmental interest and were found to require major headings with a number of subheadings for each. Managers, engineers, and scientists listed under these major headings are generally listed under more than one subheading. For example, an individual working on assessing the environmental impact of air emissions from commercial oil shale plants might be listed under: AIR, Emissions; AIR, Pollution Control and AIR, Impact Assessment.

HEALTH EFFECTS

This major heading is used to list those managers, engineers and scientists who are interested primarily in the human health impacts of an oil shale industry. HEALTH EFFECTS, Processing & Mining generally includes those individuals concerned with worker health and safety. A substantial number of managers, engineers and scientists are working to define the risks associated with oil shale "emissions and wastes"; hence, this subheading is required. Recently, interest has been growing in the health risks posed by crude shale oil and its refined products. This interest is partly in response to the mandates of the Toxic Substances Control Act (TSCA) administered by the U.S. Environmental Protection Agency. HEALTH EFFECTS, Products covers this area.

Figure 4.1 Area of Activity Index Headings

- MANAGEMENT
  - Research & Development
  - Demonstration Projects
  - Commercialization
  - Land Use
  - Socioeconomics
  - Policy & Planning
  - Permits & Regulation
  - Information
  - Financial/Legal
- PROCESSING
  - Oil Recovery
  - Mining
  - Refining
  - By-Products
  - Design
  - Economics
  - Geology
  - Resource Characterization
  - Chemical Analysis
- AIR
  - Emissions
  - Meteorology
  - Modeling
  - Monitoring
  - Chemical Analysis
  - Pollution Control
  - Impact Assessment
  - Permits & Regulation
- WATER
  - Effluents
  - Hydrology
  - Availability & Usage
  - Monitoring
  - Chemical Analysis
  - Pollution Control
  - Impact Assessment
  - Permits & Regulation
- SOLID WASTE
  - Leaching & Subsidence
  - Land Reclamation
  - Monitoring
  - Chemical Analysis
  - Pollution Control
  - Impact Assessment
  - Permits & Regulation
- HEALTH EFFECTS
  - Processing & Mining
  - Emissions & Wastes
  - Products
- ENVIRONMENT-OTHER
  - Ecology & Wildlife
  - Socioeconomics
- REGULATION
  - Air
  - Water
  - Solid Waste
  - Land Use
  - Products
  - Worker Health & Safety
  - Monitoring & Enforcement
  - Permitting
  - Standard Setting
- LOCAL GOVERNMENT
  - Colorado
  - Utah
  - Wyoming

ENVIRONMENT-OTHER

This major heading picks up two areas of environmental activity not covered elsewhere. The subheadings are self-explanatory.

REGULATION

This section is used to list those managers, engineers and scientists who have an involvement in some aspect of regulating the emerging oil shale industry. The type of regulation involved has been subdivided into six major areas: Air, Water, Solid Waste, Land Use, Products, and Worker Health & Safety. The type of regulatory activity is divided into three areas: Monitoring & Enforcement, Permitting, and Standard Setting. The major heading "REGULATION" is also cross-indexed in the AIR, WATER and SOLID WASTE categories, as mentioned before, for the convenience of the user.

LOCAL GOVERNMENT

The Local Government category is used to list those managers, engineers and scientists who work for local government and are significantly involved with the development of oil shale. Individuals listed in this section may work for local government as employees and also as volunteers. In general, the managers, engineers and scientists listed in this section of the index are also members of local committees which are beginning to play a significant role in oil shale development. The section was created to make it easy for the user to identify these individuals.

The Local Government section of the index has also been subdivided into a section for each of the states which are effected by oil shale development. A great deal of local government activity was found in Colorado. Only a small amount of activity is occurring in Utah, and, surprisingly, no local government involvement in oil shale could be found for Wyoming. Hence, no one is listed under the Wyoming subheading.

4.3 ORGANIZATION INDEX

All the organizations involved in oil shale work are listed in this section of the directory. For large and complex organizations, the overall organization name is listed first, followed by the names of subsections of the organization. For example:

U.S. Department of Energy
    Argonne National Laboratory
    Carbondale Mining Technology Center
    etc.

U.S. Environmental Protection Agency
    Ada, Oklahoma
    Athens, Georgia
    etc.

Under each subsection within an organization, the managers, engineers and scientists employed by that particular subsection are listed in alphabetical order, last name first.

4.4 COMMITTEE INDEX

All committees within government and universities with a direct involvement in oil shale are listed in this section. Committees which are part of an organization are listed under the name of the organization. There are also a number of interagency committees and these are listed under "Interagency" headings. Organizational abbreviations are used to identify managers, engineers and scientists listed in interagency and local committees. Many of the committees listed have responsibilities which go beyond oil shale, but have been listed because of a genuine involvement in some type of oil shale activity.

No judgment was made as to whether or not a committee was chartered, structured and operates in a formal manner within a particular organization. Clear and concise mandates were impossible to obtain for many committees, so the best way to obtain such information is through direct contact between the users of the directory and committee members. It is likely that some ad hoc committees are listed. Some formations are not considered to be committees within their own organizations, but rather "management teams" "management task forces" or "work groups." For the purposes of this directory, all such groups are listed as committees.

Committee members are listed in alphabetical order, last name first. Where possible the chairman has been identified and listed first. It was surprising to discover that some committees apparently do not have a chairman. Some committees also have members who do not work for government or universities. These individuals are listed as members of the committees for the sake of completeness, but are not listed elsewhere in the directory.

4.5 LOCATION INDEX

The managers, engineers and scientists within each state who are involved in oil shale are listed in this section of the directory. Under each state, the listings are subdivided by city. Names and and organizations are given.

4.6 PUBLICATIONS DIRECTORY

Any individual who supplied information on recent publications is listed in this section. Names are listed alphabetically followed by the citations which were supplied. Using a survey approach, it was impossible to get complete citations in many instances. Information on publications was obtained from some people over the phone. Other lists were received by mail, and some people did not supply any information. American Chemical Society bibliographic style was used for listing publications. Even though many citations are incomplete, it was decided that there is substantial value in presenting the information which was obtained.

The Publications Directory lists reports, papers and formal presentations from 1978 through 1980 (1980 mostly still in press).

4.7 FEDERAL, STATE AND UNIVERSITY DIRECTORY

This section lists the name, mailing address, phone number (including FTS number), and educational background of each manager, engineer or scientist who has an involvement in oil shale and is employed by a federal or state government or a university. Names are listed in alphabetical order.

4.8 LOCAL GOVERNMENT

This section lists the name, full mailing address and phone number of each manager, engineer or scientist working for local government on activities related to oil shale. Again a separate section is devoted to local government to make it easier for the user to identify these individuals. Names are listed in alphabetical order.

4.9 OIL SHALE GOVERNMENT/UNIVERSITY TELEPHONE DIRECTORY

This section of the directory is meant to provide an easy to use list of phone numbers. All names are listed in alphabetical order and are followed by an organizational abbreviation. A second Glossary of Organizational Abbreviations is supplied as part of this section.

5.0 THE STRUCTURE OF THE LOCAL GOVERNMENT IN RESPONSE TO OIL SHALE DEVELOPMENT

5.1 COLORADO

In the early 1970s the governor of Colorado divided the state into regions, each of which was to act as a clearing house for Federal programs which, if implemented, would bring about substantial changes in the region. In 1972 several Colorado western slope counties in energy and mineral rich areas formed the Colorado West Area Council of Governments (COG) to help distribute the cost of such reviews. COG has no real authority regarding the actual implementation of Federal programs, but does provide local input on the perceived impact of such programs. In addition, COG assists counties in identifying and pursuing grant funding, and in coordinating their requests for oil shale trust fund monies to help mitigate impacts.

Four COG member counties, Garfield, Mesa, Moffat and Rio Blanco, will experience substantial impact from oil shale development. These counties have also established energy related committees (county core groups) in response to a need by State energy agencies for local, county input. The members of these committees represent a variety of local community and county interests, including businesses, schools, libraries and churches. Rio Blanco County was the first to form a core group. The other three counties have now formed similar committees.

The formalized structure of the local government and community response to energy development on the western slope in Colorado is viewed by many people in the state as a positive, "state of the art" approach to providing the local population with an effective voice in planning for the future growth of the region.

5.2 UTAH

The local government response to oil shale development in Utah is much less than in Colorado. The only organization identified which is similar to those found in Colorado is the Uinta Basin Association of Governments, UBAG. Daggett and Duchesne Counties are the only members. At present, UBAG is concerned primarily with the development of oil and gas fields in the area, because there are no immediate plans for large scale oil activity.

5.3 WYOMING

Oil shale in Wyoming is, at present, overshadowed by several other, more plentiful energy sources. Hence, no local government response to oil shale development was found.

II. SUMMARY AND CONCLUSIONS

The 519 people listed in the directory can be characterized in a number of ways. The following tables are presented for the user's general information.

TABLE 1. ORGANIZATION TYPE BY STATE

	Federal	State	Local	University	Total
California	34				34
Colorado	90	27	69	54	240
Connecticut				1	1
District of Columbia	76				76
Florida	1				1
Georgia	2				2
Illinois	6				6
Massachusetts				1	1
Michigan				1	1
Minnesota	3				3
Montana	1				1
New Mexico	20				20
Nevada	5				5
North Carolina	10				10
Ohio	11				11
Oklahoma	1			1	2
Oregon	1	1			2
Tennessee	11				11
Utah	11	11	3	6	31
Virginia	5				5
Washington	10			3	13
West Virginia	5			1	6
Wisconsin	1				1
Wyoming	24	2		10	36
	328	41	72	78	519

TABLE 2. DISTRIBUTION BY FEDERAL ORGANIZATION

	Number
U.S. Department of Agriculture	12
U.S. Department of Commerce	5
Congress of the United States	4
Executive Office of the President	1
National Institute of Health	2
U.S. Department of Energy	141
U.S. Department of Housing & Urban Development	2
U.S. Department of Interior	93
U.S. Department of Labor	3
U.S. Department of Transportation	1
U.S. Environmental Protection Agency	56
U.S. General Accounting Office	1
U.S. Library of Congress	1
U.S. Public Health Service	6
	328

TABLE 3. TYPE OF COMMITTEE

	Number
Federal Agency	12
Federal Interagency	6
Federal/Local	1
Local	4
	23

*There were a total of 370 members on the various committees.

TABLE 4. ACTIVITY INVOLVEMENT

MANAGEMENT	N = 205		43.5%*
Research & Development		42.9%†	(88)
Demonstration Projects		18.5	(38)
Commercialization		11.7	(24)
Land Use		18.5	(38)
Socioeconomics		23.4	(48)
Policy & Planning		63.9	(131)
Permits & Regulation		27.8	(57)
Information		18.5	(38)
Financial/Legal		15.1	(31)
PROCESSING	N = 180		38.2%
Oil Recovery		55.6%	(100)
Mining		23.9	(43)
Refining		16.7	(30)
By-products		18.3	(33)
Design		34.4	(62)
Economics		22.2	(40)
Geology		25.0	(45)
Resource Characterization		22.2	(40)
Chemical Analysis		48.3	(87)
SOLID WASTE	N = 153		32.5%
Leaching & Subsidence		47.1	(72)
Land Reclamation		39.9	(61)
Monitoring		28.1	(43)
Chemical Analysis		34.0	(52)
Pollution Control		51.6	(79)
Impact Assessment		63.4	(97)
Permits & Regulations		20.9	(32)
HEALTH EFFECTS	N = 69		14.6%
Processing & Mining		60.9%	(42)
Emissions & Wastes		75.4	(52)
Products		59.4	(41)
AIR	N = 125		26.5%
Emissions		52.0%	(65)
Meteorology		18.4	(23)
Modeling		20.8	(26)
Monitoring		27.2	(34)
Chemical Analysis		40.8	(51)
Pollution Control		52.0	(65)
Impact Assessment		57.6	(72)
Permits & Regulation		21.6	(27)
WATER	N = 191		40.6%
Effluents		34.6%	(66)
Hydrology		37.2	(71)
Availability & Usage		34.6	(66)
Monitoring		34.6	(66)
Chemical Analysis		44.5	(85)
Pollution Control		47.6	(91)
Impact Assessment		69.1	(132)
Permits & Regulation		17.3	(33)
ENVIRONMENT-OTHER	N = 8		1.7%
Ecology & Wildlife		50.0%	(4)
Socioeconomics		50.0	(4)
REGULATION	N = 126		26.8%
Air		25.4%	(32)
Water		28.6	(36)
Solid Waste		26.2	(33)
Land Use		49.2	(62)
Products		7.9	(10)
Worker Health & Safety		17.5	(22)
Monitoring & Enforcement		28.6	(36)
Permitting		50.8	(64)
Standard Setting		52.4	(66)

---

* Total main heading percentages are based on 471 people who have at least one activity index listing.

† Subheading percentages are based on the total number of people who have one or more listing under the major heading.

GLOSSARY OF ABBREVIATIONS

ABBREV.	ORGANIZATION
BIA	U.S. DEPARTMENT OF INTERIOR Bureau of Indian Affairs
BLM	Bureau of Land Management
BR	Bureau of Reclamation
Carbondale	City of Carbondale
CC	Colorado College
CDH	STATE OF COLORADO Colorado Department of Health
CDH/RHWCD	Colorado Department of Health Radiation and Hazardous Wastes Control Division
CDH/SSP	Colorado Department of Health Stationary Sources Programs
CDH/WQCD	Colorado Department of Health Water Quality Control Division
CDHY	Department of Highways
CDLA	Department of Local Affairs
CDMLR	Department of Natural Resources Division of Mined Land Reclamation
CDNR	Department of Natural Resources
CEC	Energy Conservation Office
CEQ	Executive Office of the President Council on Environmental Quality
CERI	State of Colorado Colorado Energy Research Institute
CERT	Council of Energy Resource Tribes Office of Environmental Analysis
CHR	State of Colorado Colorado House of Representatives
CMC	Colorado Mountain College
CO	State of Colorado
Craig	City of Craig
CRWC	State of Colorado Colorado River Water Conservation District
CSM	Colorado School of Mines
CSU	Colorado State University
CU	University of Colorado
CU/CES	University of Colorado at Denver Center for Environmental Sciences
CWACG	Colorado West Area Council of Governments
Dinosaur	City of Dinosaur
DPL	City of Denver Denver Public Library
DU	UNIVERSITY OF DENVER
DU/DRI	Denver Research Institute
Fruita	City of Fruita
GAO	U.S. General Accounting Office
Glwd Spgs	City of Glenwood Springs
Grd Vly	City of Grand Valley
Grfld Cty	Garfield County
HUD	U.S. Department of Housing and Urban Development
LOC	U.S. Library of Congress
Maybell	City of Maybell
Meeker	City of Meeker
Mesa C	Mesa College
Mesa Cty	Mesa County
MIT	Massachusetts Institute of Technology
Moffatt Cty	Moffatt County
MPFRC	Mountain Plains Federal Regional Council
MSHA	U.S. Department of Labor Mine Safety & Health Administration
MTU	Michigan Technical University
NBS	U.S. Department of Commerce U.S. National Bureau of Standards

New Castle	City of New Castle
NIH/NIEHS	National Institute of Health National Institute of Environmental Health Sciences
NIOSH	U.S. Public Health Service National Institute for Occupational Safety and Health
NPS	U.S. Department of Interior National Park Service
ODF	State of Oregon Department of Forestry
OTA	Congress of the United States Office of Technology Assessment
OU	University of Oklahoma
Palisade	City of Palisade
Rangely	City of Rangely
Rifle	City of Rifle
Rio Bl Cty	Rio Blanco County
Silt	City of Silt
UBAG	Uinta Basin Association of Governments
UDH	STATE OF UTAH Department of Health
UDNR	Department of Natural Resources
UDSL	Division of State Lands
UEO	Energy Office
UGMS	Geological and Mineral Survey
Uinta Cty	Uinta County
USBM	U.S. Department of Interior Bureau of Mines
USDA	U.S. DEPARTMENT OF AGRICULTURE
USDA/FS	Forest Service
USDA/SCS	Soil Conservation Service
USDOE/Arg	U.S. DEPARTMENT OF ENERGY Argonne National Laboratory
USDOE/Car	Carbondale Mining Technology Center
USDOE/Den	Denver Project Office
USDOE/EV	Office of Environment
USDOE/FE	Office of Fossil Energy
USDOE/ITRI	Inhalation Toxicology Research Institute
USDOE/LASL	Los Alamos Scientific Laboratory
USDOE/LBL	Lawrence Berkeley Laboratory
USDOE/LETC	Laramie Energy Technology Center
USDOE/LLL	Lawrence Livermore Laboratory
USDOE/Navy	Naval Petroleum & Oil Shale Reserves
USDOE/ORNL	Oak Ridge National Laboratory
USDOE/PE	Policy and Evaluation
USDOE/PNL	Pacific Northwest Laboratories
USDOE/RA	Office of Resource Applications
USDOE/SL	Sandia Laboratories
USDOI	U.S. Department of Interior
USDOT	U.S. Department of Transportation
USEPA	U.S. ENVIRONMENTAL PROTECTION AGENCY
USEPA/Ada	Ada, OK
USEPA/Ath	Athens, GA
USEPA/Ci	Cincinnati, OH
USEPA/Corv	Corvallis, OR
USEPA/Dul	Duluth, MN
USEPA/EGD	Effluent Guidelines Division
USEPA/GB	Gulf Breeze, FL
USEPA/IEEP	Interagency Energy Environment Program
USEPA/LV	Las Vegas, NV
USEPA/OAQPS	Office of Air Quality Planning and Standards
USEPA/OE	Office of Enforcement
USEPA/OEPER	Office of Research and Development Office of Environmental Processes and Effects Research
USEPA/OER	Office of Environmental Review
USEPA/OGC	Office of General Counsel
USEPA/OPM	Office of Planning and Management
USEPA/OPTS	Office of Pesticides and Toxic Substances
USEPA/ORD	Office of Research and Development

USEPA/OSW	Office of Water and Waste Management Office of Solid Waste
USEPA/OWWM	Office of Water and Waste Management
USEPA/PPD	Office of Planning and Management Office of Planning Evaluation Policy Planning Division
USEPA/RTP	Research Triangle Park, NC
USEPA/SAB	Office of the Administrator Science Advisory Board
USEPA/VIII	Regional Staff, Region VIII Office of Energy Policy Coordination
USFWS	U.S. DEPARTMENT OF INTERIOR U.S. Fish and Wildlife Service
USGS	U.S. GEOLOGICAL SURVEY
USGS/AOSO	Area Oil Shale Office
USGS/CD	Conservation Division
USGS/GD	Geologic Division
USGS/WRD	Water Resources Division
USL	State of Utah Legislative District 70
USU	Utah State University
UT	State of Utah
UU	University of Utah
UW	University of Washington
UWPRS	State of Utah Water and Power Resources Service
Wayne St.	Wayne State University
WDEP	STATE OF WYOMING Department of Economic Planning and Development
WDEQ	Department of Environmental Quality
Weber St.	Weber State College
WSU	Washington State University
WU	University of Wyoming
WVU	West Virginia University
Yale	Yale University

AREAS OF ACTIVITY INDEX

MANAGEMENT-Research & Development

Federal:

Ackerman, F. Jay	USDOE/LLL
Barnes, H. Michael	USEPA/RTP
Biesinger, Kenneth E.	USEPA/Dul
Blakey, James S.	USGS/WRD
Brandenburg, Charles F.	USDOE/LETC
Branstetter, Barbara	USDOE/LBL
Cawley, William A.	USEPA/Ci
Christianson, Alden G.	USEPA/Ci
Coffin, V.M.D., David L.	USEPA/RTP
Davis, Grant	USDA/FS
Decora, Andrew W.	USDOE/LETC
Desborough, George A.	USGS/GD
Dial, Clyde J.	USEPA/Ci
Dudley, Jr., William W.	USGS/WRD
Durham, Jack L.	USEPA/RTP
Dutcher, Lee C.	USGS/WRD
Epler, James L.	USDOE/ORNL
Fox, Douglas G.	USDA/FS
Franklin, Ralph	USDOE/EV
Frietsch, III, William	USEPA/OEPER
Galli, Alfred A.	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Goldstein, Gerald	USDOE/EV
Gottlieb, Myron	USDOE/EV
Guerin, Michael R.	USDOE/ORNL
Haines, William E.	USDOE/LETC
Harak, Arnold	USDOE/LETC
Harrington, Larry W.	USDOE/LETC
Harris, Eugene F.	USEPA/Ci
Hartstein, Art	USDOE/FE
Hatch, Frederick T.	USDOE/LLL
Hertz, Harry S.	NBS
Hessel, Darryl L.	USDOE/PNL
Holland, Laurence Martin	USDOE/LASL
House, Peter	USDOE/EV
Huffman, George L.	USEPA/Ci
Jakobson, Kurt	USEPA/ORD
Johnson, Donald R.	USDOE/LETC
Kealy, Dan	USBM
Lewis, Arthur E.	USDOE/LLL
Lillian, Daniel	USDOE/EV
Lukens, Larry A.	USDOE/RA
McCarthy, Jr., William N.	USEPA/SAB
McFarlane, Samuel B.	USDOE/Den
Noll, Frank	BLM
Norman, Vernon W.	USGS/WRD
O'Brien, W. Jack	USDOE/Den
Peck, Dallas L.	USGS
Perkins, Richard	USDOE/PNL
Poulson, Richard E.	USDOE/LETC
Princiotta, Frank T.	USEPA/ORD
Ramsey, Jerry W.	USDOE/FE
Raymond, Jack D.	USDOE/LETC
Reznek, Steven R.	USEPA/ORD
Richards, Norman L.	USEPA/GB
Riegel, Kurt W.	USEPA/ORD
Robbins, Martin D.	CERI
Rotariu, George J.	USDOE/EV
Rothman, Albert J.	USDOE/LLL
Rousa, Gerald	USEPA/ORD
Schottler, George R.	USBM
Seibel, Richard	USBM
Shull, Roger D.	USDOE/EV
Silverman, Mark N.	USDOE/Den
Smith, David A.	USDOE/EV
Stemmle, James T.	USEPA/IEEP
Stephan, David G.	USEPA/Ci
Sudduth, Bruce C.	USDOE/LETC
Timourian, Hector	USDOE/LLL
Utter, Stephen	USBM
Walter, David J.	BLM
Weber, James	USDOE/LETC
Wieber, Paul R.	USDOE/FE

State:

Hecox, Walter E.	CDNR
Holman, Roger	CEC
Ladwig, Lewis R.	CDNR
Ripzma, Howard R.	UGMS

University:

Chappell, Willard R.	CU
Cornish, Rodney H.	DU/DRI
Gala, Kishor	DU/DRI
Gale, Charles	DU/DRI
Jovanovich, Andy	DU/DRI
Linhart, Yan	CU
McKell, Cyrus	USU
Melvin, Jr., Walter W.	CSU
Schmidt-Collerus, Josef J.	DU/DRI
Williams, Ralph E.	DU/DRI

Demonstration Projects

Federal:

Ash, Henry O.	USDOI
Brandenburg, Charles F.	USDOE/LETC
Davis, Grant	USDA/FS
Davis, Ruth M.	USDOE/RA
Decora, Andrew W.	USDOE/LETC
Docktor, Leroy	USDOE/LETC
Halow, Mary	USDOE/RA
Harney, Brian M.	USDOE/RA
Hoffman, Eric G.	USGS/AOSO
Huffman, George L.	USEPA/Ci
Kealy, Dan	USBM
Langenkamp, R. Dobie	USDOE/RA
Lewis, Arthur E.	USDOE/LLL
Little, William E.	USDOE/LETC
Lukens, Larry A.	USDOE/RA
McFarlane, Samuel B.	USDOE/Den
Miller, Glen A.	USGS/AOSO
Nelson, Robert H.	USDOE/RA
Noll, William L.	USDOE/Den
O'Brien, W. Jack	USDOE/Den
Petzrick, Paul A.	USDOE/RA
Poulson, Richard E.	USDOE/LETC
Princiotta, Frank T.	USEPA/ORD
Ramsey, Jerry W.	USDOE/FE
Raymond, Jack D.	USDOE/LETC
Rothberg, Paul F.	LOC
Rutledge, Peter A.	USGS/AOSO
Schottler, George R.	USBM
Silverman, Mark N.	USDOE/Den
Stevens, Aldred L. (Al)	USDOE/SL
Sudduth, Bruce C.	USDOE/LETC
Walter, David J.	BLM
Watkins, J. Wade	USDOE/FE
Weber, James	USDOE/LETC
Zukor, Stephen H.	USDOE/RA

State:

Ladwig, Lewis R.	CDNR
Millar, Rod	UEO

University:

Schmidt-Collerus, Josef J.	DU/DRI

Commercialization

Federal:

Brandenburg, Charles F.	USDOE/LETC
Council, Clarence	USDOE/Den
Davis, Ruth M.	USDOE/RA
Decora, Andrew W.	USDOE/LETC
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Halow, Mary	USDOE/RA
Harak, Arnold	USDOE/LETC
Harney, Brian M.	USDOE/RA
Langenkamp, R. Dobie	USDOE/RA
Lewis, Arthur E.	USDOE/LLL
Lukens, Larry A.	USDOE/RA
Norman, Vernon W.	USGS/WRD
O'Brien, W. Jack	USDOE/Den
Petzrick, Paul A.	USDOE/RA
Robinson, Phillip L.	OTA
Rothberg, Paul F.	LOC
Rutledge, Peter A.	USGS/AOSO
Silverman, Mark N.	USDOE/Den
Walter, David J.	BLM
Watkins, J. Wade	USDOE/FE

State:

Henderson, Charles R.	UDNR
Ladwig, Lewis R.	CDNR
Rold, John	CDNR

Land Use

Federal:

Andrus, Dale R.	BLM
Bunting, John Stewart	GAO
Collier, L. W. (Bill)	BIA
David, Elanor L.	USDOI
Davis, Grant	USDA/FS
Frietsch, III, William	USEPA/OEPER
Galli, Alfred A.	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Hager, James W.	USGS/AOSO
Kealy, Dan	USBM
Lewis, Arthur E.	USDOE/LLL
McBrumen, Roy	BLM
Miller, Glen A.	USGS/AOSO
Miller, Wendy L.	USDA/FS
Nelson, Robert H.	USDOE/RA
Noll, Frank	BLM
Pearson, Marvin	BLM
Roberts, Cecil M.	BLM
Robinson, Phillip L.	OTA
Rutledge, Peter A.	USGS/AOSO
Smith, Curtis	BLM
Springwater, Ray	BIA
VanDerwalker, John G.	USFWS
Walter, David J.	BLM

State:

Barry, III, Hamlet J.	CDNR
Dinehart, William K.	UDSL
Henderson, Charles R.	UDNR
Ladwig, Lewis R.	CDNR
Millar, Rod	UEO

Prince, Donald G.	UDSL
Ripzma, Howard R.	UGMS
Rold, John	CDNR
Shelton, David C.	CDMLR

Local:

Baldwin, Ray	Grfld Cty
Schultz, Timothy W.	Rio Bl Cty

University:

Cook, Wayne	CSU
Linhart, Yan	CU

Socioeconomics

Federal:

Collier, L. W. (Bill)	BIA
Davis, Grant	USDA/FS
Davis, Ruth M.	USDOE/RA
Davis, William E.	OTA
Dutcher, Lee C.	USGS/WRD
Gale, Barry G.	USDOE/RA
Garrett, Pauline (Polly)	USDOE/Den
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Jaten, Charles E.	HUD
Lewis, Arthur E.	USDOE/LLL
Miller, Betty	HUD
Nelson, Robert H.	USDOE/RA
Santini, Danilo	USDOE/Arg
Schwengels, Paul F.	USEPA/ORD
Silverman, Mark N.	USDOE/Den
Springwater, Ray	BIA
Walter, David J.	BLM

State:

Cattany, Ronald W.	CEC
Edmonds, Carol	CHR
Goodier, John T.	WDEP
Hecox, Walter E.	CDNR
Henderson, Charles R.	UDNR
Hunt, Verl F. ("Buz")	UEO
Jordon, Charles	CDLA
Lorenson, Burman	MPFRC
Millar, Rod	UEO
Schmitz, Steve	CDLA
Traylor, Frank A.	CDH

Local:

Albers, Maxine	Mesa Cty
Brand, Annette A.	Silt
Demos, Bob	CWACG
Deppe, Daniel W.	Rifle
Downer, Wallace G.	Fruita
Flewelling, Richard A.	Carbondale
Heitman, Ronald L.	UBAG
Johnson, John W.	CWACG
Lollar, Cecil E.	Rangely
Mattivi, Pete	New Castle
McDaniel, Floyd E.	Grd Vly
Merkel, Lee D.	Rifle
Mitchell, George E.	Rifle
Schultz, Timothy W.	Rio Bl Cty
Shultz, Claude E.	Meeker
Smith, Marian I.	Glwd Spgs
Thompson, Jerry Leonard	Craig

University:

Devine, Michael	OU
Gilmore, John S.	DU/DRI

Policy & Planning

Federal:

Allen, Frederick W.	USEPA/OPM
Altshuler, Morris	USEPA/ORD
Ash, Henry O.	USDOI
Barnes, H. Michael	USEPA/RTP
Brandenburg, Charles F.	USDOE/LETC
Bunting, John Stewart	GAO
Cawley, William A.	USEPA/Ci
Christianson, Alden G.	USEPA/Ci
Collier, L. W. (Bill)	BIA
Curlin, James W.	USDOI
David, Elanor L.	USDOI
Davis, Grant	USDA/FS
Davis, Ruth M.	USDOE/RA
Davis, William E.	OTA
Decora, Andrew W.	USDOE/LETC
Desborough, George A.	USGS/GD
Dial, Clyde J.	USEPA/Ci
Dionne, Jane	USDOE/PE
Dudley, Jr., William W.	USGS/WRD
Durham, Jack L.	USEPA/RTP
Dutcher, Lee C.	USGS/WRD
Franklin, Ralph	USDOE/EV
Frietsch, III, William	USEPA/OEPER
Galli, Alfred A.	USEPA/OEPER
Goldstein, Gerald	USDOE/EV
Goode, Bill	USDOE/Navy
Hager, James W.	USGS/AOSO
Haines, William E.	USDOE/LETC
Harrington, Larry W.	USDOE/LETC
Hartstein, Art	USDOE/FE
House, Peter	USDOE/EV
Jakobson, Kurt	USEPA/ORD
Jaten, Charles E.	HUD
Kozlowski, Richard G.	USEPA/OE
Krug, Eugene P.	USDOE/EV
Langenkamp, R. Dobie	USDOE/RA
Lewis, Arthur E.	USDOE/LLL
Little, William E.	USDOE/LETC
Lukens, Larry A.	USDOE/RA
Mazza, Carl	USEPA/OPTS

McBrumen, Roy	BLM
McCarthy, Jr., William N.	USEPA/SAB
Miller, Glen A.	USGS/AOSO
Mott, William E.	USDOE/EV
Nelson, Robert H.	USDOE/RA
Noll, Frank	BLM
O'Brien, W. Jack	USDOE/Den
Petzrick, Paul A.	USDOE/RA
Poulton, Patricia Lynne	OTA
Princiotta, Frank T.	USEPA/ORD
Ramsey, Jerry W.	USDOE/FE
Raymond, Jack D.	USDOE/LETC
Reznek, Steven R.	USEPA/ORD
Riegel, Kurt W.	USEPA/ORD
Robbins, Martin D.	CERI
Robinson, Phillip L.	OTA
Rotariu, George J.	USDOE/EV
Rousa, Gerald	USEPA/ORD
Rutledge, Peter A.	USGS/AOSO
Schwengels, Paul F.	USEPA/ORD
Scroggin, Don G.	CEQ
Shull, Roger D.	USDOE/EV
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Smith, Curtis	BLM
Smith, David A.	USDOE/EV
Springwater, Ray	BIA
Stephan, David G.	USEPA/Ci
Surles, Terry	USDOE/Arg
Telliard, William A.	USEPA/EGD
Thoem, Terry L.	USEPA/VIII
Tundermann, David W.	USEPA/OPM
Wagner, Martin	USEPA/PPD
Walsh, Robert T.	USEPA/OAQPS
Walter, David J.	BLM
Watkins, J. Wade	USDOE/FE
Weber, James	USDOE/LETC
Wieber, Paul R.	USDOE/FE
Williams, Ted	USDOE/EV
Zukor, Stephen H.	USDOE/RA

State:

Barry, III, Hamlet J.	CDNR
Cattany, Ronald W.	CEC
Dinehart, William K.	UDSL
Goodier, John T.	WDEP
Hecox, Walter E.	CDNR
Henderson, Charles R.	UDNR
Holman, Roger	CEC
Hunt, Verl F. ("Buz")	UEO
Jordon, Charles	CDLA
Ladwig, Lewis R.	CDNR
Lorenson, Burman	MPFRC
Martin, Joan	CERI
Millar, Rod	UEO
Prince, Donald G.	UDSL
Rickers, Alvin E.	UDH
Ripzma, Howard R.	UGMS
Rold, John	CDNR
Schmitz, Steve	CDLA
Sudweeks, Calvin K.	UDH
Traylor, Frank A.	CDH
Wood, Randolph	WDEQ

Local:

Albers, Maxine	Mesa Cty
Baldwin, Ray	Grfld Cty
Brand, Annette A.	Silt
Demos, Bob	CWACG
Deppe, Daniel W.	Rifle
Downer, Wallace G.	Fruita
Flewelling, Richard A.	Carbondale
Heitman, Ronald L.	UBAG
Johnson, John W.	CWACG
Kring, R. Lynn	CWACG
Lollar, Cecil E.	Rangely
Mattivi, Pete	New Castle
McDaniel, Floyd E.	Grd Vly
Merkel, Lee D.	Rifle
Mitchell, George E.	Rifle
Schultz, Timothy W.	Rio Bl Cty
Shultz, Claude E.	Meeker
Siek, Robert D.	CERT
Smith, Marian I.	Glwd Spgs
Thompson, Jerry Leonard	Craig

University:

Bleistein, Sandra	DU/DRI
Chappell, Willard R.	CU
Cornish, Rodney H.	DU/DRI
Devine, Michael	OU
Gale, Charles	DU/DRI
Jovanovich, Andy	DU/DRI
Peterson, Kathy	CU/CES
Prien, Isabell	DU/DRI
Taylor, Graham C.	DU/DRI
Tedeschi, Terry L.	CU/CES

Permits & Regulation

Federal:

Allen, Frederick W.	USEPA/OPM
Andrus, Dale R.	BLM
Barnes, H. Michael	USEPA/RTP
Cawley, William A.	USEPA/Ci
Collier, L. W. (Bill)	BIA
Curlin, James W.	USDOI
Dana, Peter	USDOE/LETC
Dionne, Jane	USDOE/PE
Durham, Jack L.	USEPA/RTP
Garbe, Yvonne M.	USEPA/OSW

Goode, Bill	USDOE/Navy
Hager, James W.	USGS/AOSO
Harrington, Larry W.	USDOE/LETC
Joseph, Todd M.	USEPA/OGC
Kash, Don E.	USGS/CD
Kirby, Ron	USEPA/EGD
Kozlowski, Richard G.	USEPA/OE
Lewis, Arthur E.	USDOE/LLL
Madsen, Lowell L.	USDOI
McBrumen, Roy	BLM
Noll, Frank	BLM
Noll, William L.	USDOE/Den
Pearson, Marvin	BLM
Poulton, Patricia Lynne	OTA
Princiotta, Frank T.	USEPA/ORD
Rutledge, Peter A.	USGS/AOSO
Santini, Danilo	USDOE/Arg
Silverman, Mark N.	USDOE/Den
Smith, Curtis	BLM
Springwater, Ray	BIA
Stephan, David G.	USEPA/Ci
Sutton, Glen	MSHA
Telliard, William A.	USEPA/EGD
Thoem, Terry L.	USEPA/VIII
Tundermann, David W.	USEPA/OPM
Wagner, Martin	USEPA/PPD
Walsh, Robert T.	USEPA/OAQPS
Walter, David J.	BLM

State:

Bishard, P.E., A. C.	CDH/SSP
Henderson, Charles R.	UDNR
Martin, Joan	CERI
Millar, Rod	UEO
Rickers, Alvin E.	UDH
Ripzma, Howard R.	UGMS
Rold, John	CDNR
Rozich, Frank J.	CDH/WQCD
Shelton, David C.	CDMLR
Sudweeks, Calvin K.	UDH
Traylor, Frank A.	CDH
Wallum, Arden, P.E.	CDH/WQCD
Wood, Randolph	WDEQ

Local:

Baldwin, Ray	Grfld Cty
George, Robert D.	UBAG
Kring, R. Lynn	CWACG
Schultz, Timothy W.	Rio Bl Cty
Siek, Robert D.	CERT

University:

Bleistein, Sandra	DU/DRI

Information

Federal:

Ackerman, F. Jay	USDOE/LLL
Allen, Frederick W.	USEPA/OPM
Altshuler, Morris	USEPA/ORD
Blakey, James S.	USGS/WRD
Brandenburg, Charles F.	USDOE/LETC
David, Elanor L.	USDOI
Davis, Grant	USDA/FS
Docktor, Leroy	USDOE/LETC
Dutcher, Lee C.	USGS/WRD
Frietsch, III, William	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Hager, James W.	USGS/AOSO
Harak, Arnold	USDOE/LETC
Kealy, Dan	USBM
Lewis, Arthur E.	USDOE/LLL
McBrumen, Roy	BLM
McCarthy, Jr., William N.	USEPA/SAB
Raymond, Jack D.	USDOE/LETC
Rothberg, Paul F.	LOC
Rutledge, Peter A.	USGS/AOSO
Silverman, Mark N.	USDOE/Den
Surles, Terry	USDOE/Arg
Weber, James	USDOE/LETC

State:

Cattany, Ronald W.	CEC
Hunt, Verl F. ("Buz")	UEO
Ladwig, Lewis R.	CDNR
Millar, Rod	UEO
Ripzma, Howard R.	UGMS

Local:

Collins, Kay	DPL

University:

Chappell, Willard R.	CU
Gale, Charles	DU/DRI
Gregory, William P.	DU/DRI
Linhart, Yan	CU
Peterson, Kathy	CU/CES
Prien, Isabell	DU/DRI
Stevens, Pamela	DU/DRI
Tedeschi, Terry L.	CU/CES

Financial/Legal

Federal:

Altshuler, Morris	USEPA/ORD
Bunting, John Stewart	GAO
Collier, L. W. (Bill)	BIA
Dutcher, Lee C.	USGS/WRD
Frietsch, III, William	USEPA/OEPER

Garrett, Pauline (Polly)	USDOE/Den
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Halow, Mary	USDOE/RA
Harrington, Larry W.	USDOE/LETC
Jaten, Charles E.	HUD
Joseph, Todd M.	USEPA/OGC
Kash, Don E.	USGS/CD
Langenkamp, R. Dobie	USDOE/RA
Lewis, Arthur E.	USDOE/LLL
Lukens, Larry A.	USDOE/RA
Madsen, Lowell L.	USDOI
McBrumen, Roy	BLM
Nelson, Robert H.	USDOE/RA
Robinson, Phillip L.	OTA
Santini, Danilo	USDOE/Arg
Silverman, Mark N.	USDOE/Den
Springwater, Ray	BIA
Stemmle, James T.	USEPA/IEEP

State:

Barry, III, Hamlet J.	CDNR
Cattany, Ronald W.	CEC
Edmonds, Carol	CHR
Holman, Roger	CEC

Local:

Johnson, John W.	CWACG

University:

Cornish, Rodney H.	DU/DRI
Tedeschi, Terry L.	CU/CES

PROCESSING-Oil Recovery

Federal:

Ackerman, F. Jay	USDOE/LLL
Ash, Henry O.	USDOI
Barker, Lawrence K.	USGS/AOSO
Brady, Ray A.	USGS/AOSO
Brandenburg, Charles F.	USDOE/LETC
Braun, Robert L.	USDOE/LLL
Breger, Irving A.	USGS
Burnham, Alan K.	USDOE/LLL
Butcher, Barry M.	USDOE/SL
Campbell, John H.	USDOE/LLL
Carley, James F.	USDOE/LLL
Caudle, Rodney	USDOE/Car
Chester, Stephen	NBS
Christiansen, David E.	USDOE/LLL
Costin, Laurence S.	USDOE/SL
Decora, Andrew W.	USDOE/LETC
Desborough, George A.	USGS/GD
Docktor, Leroy	USDOE/LETC
Fish, Richard H.	USDOE/LBL
Fruchter, Jonathan	USDOE/PNL
Galloway, Terry R.	USDOE/LLL
Girvin, Donald	USDOE/LBL
Goldberg, Arnold J.	USDOE/EV
Grady, Dennis E.	USDOE/SL
Gravatt, C. C.	NBS
Guerin, Michael R.	USDOE/ORNL
Halow, Mary	USDOE/RA
Harak, Arnold	USDOE/LETC
Harney, Brian M.	USDOE/RA
Hayduk, Charles	USDOE/Car
Hertz, Harry S.	NBS
Ho, C. H.	USDOE/ORNL
Hodgson, Alfred T.	USDOE/LBL
Hoffman, Eric G.	USGS/AOSO
Holcomb, David J.	USDOE/SL
House, Peter	USDOE/EV
Johnson, Donald R.	USDOE/LETC
Kland, Mathilde J.	USDOE/LBL
Lawlor, Dale L.	USDOE/LETC
Lewis, Arthur E.	USDOE/LLL
Long, Jr., Andrew	USDOE/LETC
Lukens, Larry A.	USDOE/RA
Mallon, Richard G.	USDOE/LLL
Martel, Richard	USDOE/LETC
Merriam, Norm	USDOE/LETC
Neel, Robert R.	USDOE/SL
Noll, William L.	USDOE/Den
Parrish, R. Leon	USDOE/SL
Petzrick, Paul A.	USDOE/RA
Raley, John H.	USDOE/LLL
Ramsey, Jerry W.	USDOE/FE
Rothberg, Paul F.	LOC
Rothman, Albert J.	USDOE/LLL
Rubin, Ira B.	USDOE/ORNL
Rutledge, Peter A.	USGS/AOSO
Sandholtz, Willis A.	USDOE/LLL
Schottler, George R.	USBM
Sheerin, John C.	USDOE/RA
Sisemore, Clyde J.	USDOE/LLL
Sladek, Thomas A.	OTA
Spall, W. Dale	USDOE/LASL
Stemmle, James T.	USEPA/IEEP
Sudduth, Bruce C.	USDOE/LETC
Tewes, Howard A.	USDOE/LLL
Thomas, Harold E.	USDOE/FE
Tucker, Roger A.	USGS/AOSO
Utter, Stephen	USBM
Virgona, Joseph E.	USDOE/LETC
Ward, Raymond L.	USDOE/LLL
Watkins, J. Wade	USDOE/FE
Weber, James	USDOE/LETC
Wheeler, P.E., Robert W.	NIOSH
Wieber, Paul R.	USDOE/FE
Wilkerson, Connie Lewis	USDOE/PNL
Zeigler, Timothy W.	USDOE/Car
Zukor, Stephen H.	USDOE/RA

State:

Goodier, John T.	WDEP
Henderson, Charles R.	UDNR
Ripzma, Howard R.	UGMS

University:

Chong, Kenneth	WU
Crowl, Daniel A.	Wayne St.
Culbertson, William J.	DU/DRI
Dickson, Philip F.	CSM
Gala, Kishor	DU/DRI
Gary, James H.	CSM
Habenicht, Charles H.	DU/DRI
Hill, George Richard	UU
Hines, Tony	CSM
Jacobs, Harold R.	UU
Katell, Sidney	WVU
Melvin, Jr., Walter W.	CSU
Nevens, Thomas	DU/DRI
Noble, Richard D.	WU
Prien, Isabell	DU/DRI
Probstein, Ronald F.	MIT
Schmidt-Collerus, Josef J.	DU/DRI
Shaffron, Michael	DU/DRI
Snyer, William H.	DU/DRI
Sohn, Hong Y.	UU
Yesavage, Victor F.	CSM

Mining

Federal:

Bates, Ed	USEPA/Ci
Bloomfield, Roger A.	USBM
Butcher, Barry M.	USDOE/SL
Caudle, Rodney	USDOE/Car
Costin, Laurence S.	USDOE/SL
Dana, Peter	USDOE/LETC
Decora, Andrew W.	USDOE/LETC
Demou, Sam	USBM
Goldberg, Arnold J.	USDOE/EV
Grady, Dennis E.	USDOE/SL
Hawkins, James E.	USBM
Hayduk, Charles	USDOE/Car
Hoffman, Eric G.	USGS/AOSO
Holcomb, David J.	USDOE/SL
Horino, Frank G.	USBM
Kirby, Ron	USEPA/EGD
Lewis, Arthur E.	USDOE/LLL
Lukens, Larry A.	USDOE/RA
Neel, Robert R.	USDOE/SL
Olsson, William A.	USDOE/SL
Parrish, R. Leon	USDOE/SL
Rothberg, Paul F.	LOC
Rutledge, Peter A.	USGS/AOSO
Schottler, George R.	USBM
Stevens, Aldred L. (Al)	USDOE/SL
Thomas, Harold E.	USDOE/FE
Tucker, Roger A.	USGS/AOSO
Utter, Stephen	USBM
Welder, Frank A.	USGS/WRD
Wheeler, P.E., Robert W.	NIOSH
Youngberg, Alv Dan	USDOE/LETC
Zeigler, Timothy W.	USDOE/Car

State:

Goodier, John T.	WDEP

University:

Chang, Nien-Yin	CU
Chong, Kenneth	WU
Crowl, Daniel A.	Wayne St.
Culbertson, William J.	DU/DRI
Hustrulid, William A.	CSM
Katell, Sidney	WVU
Morse, Jerome G.	CSM
Schmidt-Collerus, Josef J.	DU/DRI
Snyer, William H.	DU/DRI
Williams, Ralph E.	DU/DRI

Refining

Federal:

Barker, Lawrence K.	USGS/AOSO
Brandenburg, Charles F.	USDOE/LETC
Denny, Dale A.	USEPA/RTP
Desborough, George A.	USGS/GD
Goldberg, Arnold J.	USDOE/EV
Harney, Brian M.	USDOE/RA
Lailas, Nicholas	USDOE/RA
Lewis, Arthur E.	USDOE/LLL
Lukens, Larry A.	USDOE/RA
Petzrick, Paul A.	USDOE/RA
Rothberg, Paul F.	LOC
Sheerin, John C.	USDOE/RA
Sladek, Thomas A.	OTA
Spall, W. Dale	USDOE/LASL
Sudduth, Bruce C.	USDOE/LETC
Tichenor, Bruce A.	USEPA/RTP
Watkins, J. Wade	USDOE/FE
Weber, James	USDOE/LETC
Wheeler, P.E., Robert W.	NIOSH
Wieber, Paul R.	USDOE/FE
Zukor, Stephen H.	USDOE/RA

University:

Culbertson, William J.	DU/DRI
Dickson, Philip F.	CSM
Hill, George Richard	UU
Jacobs, Harold R.	UU
Katell, Sidney	WVU
Nevens, Thomas	DU/DRI
Noble, Richard D.	WU
Sohn, Hong Y.	UU
Yesavage, Victor F.	CSM

By-products

Federal:

Brandenburg, Charles F.	USDOE/LETC
Burnham, Alan K.	USDOE/LLL
Desborough, George A.	USGS/GD
Harney, Brian M.	USDOE/RA
Hawkins, James E.	USBM
Kland, Mathilde J.	USDOE/LBL
Lailas, Nicholas	USDOE/RA
Lewis, Arthur E.	USDOE/LLL
Lukens, Larry A.	USDOE/RA
Mallon, Richard G.	USDOE/LLL
Martel, Richard	USDOE/LETC
Nicholson, David E.	USBM
Petzrick, Paul A.	USDOE/RA
Rothberg, Paul F.	LOC
Schottler, George R.	USBM
Spall, W. Dale	USDOE/LASL
Stewart, Bill M.	USBM
Weber, James	USDOE/LETC
Wheeler, P.E., Robert W.	NIOSH

University:

Culbertson, William J.	DU/DRI
Dickson, Philip F.	CSM
Gala, Kishor	DU/DRI
Hill, George Richard	UU
Hines, Tony	CSM
Howatson, John	WU
Jacobs, Harold R.	UU
Katell, Sidney	WVU
Natusch, David S.	CSU
Nevens, Thomas	DU/DRI
Noble, Richard D.	WU
Schmidt-Collerus, Josef J.	DU/DRI
Sohn, Hong Y.	UU
Wildeman, Thomas R.	CSM

Design

Federal:

Ackerman, F. Jay	USDOE/LLL
Brandenburg, Charles F.	USDOE/LETC
Braun, Robert L.	USDOE/LLL
Burnham, Alan K.	USDOE/LLL
Butcher, Barry M.	USDOE/SL
Campbell, John H.	USDOE/LLL
Carley, James F.	USDOE/LLL
Caudle, Rodney	USDOE/Car
Christiansen, David E.	USDOE/LLL
Costin, Laurence S.	USDOE/SL
Demou, Sam	USBM
Docktor, Leroy	USDOE/LETC
Fruchter, Jonathan	USDOE/PNL
Galloway, Terry R.	USDOE/LLL
Grady, Dennis E.	USDOE/SL
Harak, Arnold	USDOE/LETC
Harney, Brian M.	USDOE/RA
Hawkins, James E.	USBM
Hayduk, Charles	USDOE/Car
Hoffman, Eric G.	USGS/AOSO
Holcomb, David J.	USDOE/SL
Horino, Frank G.	USBM
Lewis, Arthur E.	USDOE/LLL
Long, Jr., Andrew	USDOE/LETC
Lukens, Larry A.	USDOE/RA
Mallon, Richard G.	USDOE/LLL
Martel, Richard	USDOE/LETC
Merriam, Norm	USDOE/LETC
Neel, Robert R.	USDOE/SL
Olsson, William A.	USDOE/SL
Parrish, R. Leon	USDOE/SL
Petzrick, Paul A.	USDOE/RA
Rothberg, Paul F.	LOC
Sandholtz, Willis A.	USDOE/LLL
Schottler, George R.	USBM
Sladek, Thomas A.	OTA
Stevens, Aldred L. (Al)	USDOE/SL
Sudduth, Bruce C.	USDOE/LETC
Thomas, Harold E.	USDOE/FE
Utter, Stephen	USBM
Virgona, Joseph E.	USDOE/LETC
Watkins, J. Wade	USDOE/FE
Weber, James	USDOE/LETC
Welder, Frank A.	USGS/WRD
Wieber, Paul R.	USDOE/FE
Wilkerson, Connie Lewis	USDOE/PNL
Zeigler, Timothy W.	USDOE/Car
Zukor, Stephen H.	USDOE/RA

University:

Chang, Nien-Yin	CU
Chong, Kenneth	WU
Crowl, Daniel A.	Wayne St.
Culbertson, William J.	DU/DRI
Dickson, Philip F.	CSM
Hill, George Richard	UU
Hustrulid, William A.	CSM
Jacobs, Harold R.	UU
Katell, Sidney	WVU
Nevens, Thomas	DU/DRI
Probstein, Ronald F.	MIT
Snyer, William H.	DU/DRI
Sohn, Hong Y.	UU
Yesavage, Victor F.	CSM

Economics

Federal:

Barse, Joseph R.	USDA
Bradley, Richard A.	USDOE/EV
Brady, Ray A.	USGS/AOSO
Brandenburg, Charles F.	USDOE/LETC
Bunting, John Stewart	GAO
Christiansen, David E.	USDOE/LLL
Goldberg, Arnold J.	USDOE/EV
Halow, Mary	USDOE/RA
Harney, Brian M.	USDOE/RA
House, Peter	USDOE/EV
Johnson, Ronald C.	USGS/GD
Lewis, Arthur E.	USDOE/LLL
Lukens, Larry A.	USDOE/RA
Mallon, Richard G.	USDOE/LLL
Martel, Richard	USDOE/LETC
Petzrick, Paul A.	USDOE/RA
Robinson, Phillip L.	OTA
Rothberg, Paul F.	LOC
Sheerin, John C.	USDOE/RA
Stewart, Bill M.	USBM
Sudduth, Bruce C.	USDOE/LETC
Utter, Stephen	USBM
Wagner, Martin	USEPA/PPD
Weber, James	USDOE/LETC
Zukor, Stephen H.	USDOE/RA

State:

Cattany, Ronald W.	CEC
Holman, Roger	CEC
Hunt, Verl F. ("Buz")	UEO
Martin, Joan	CERI
Ripzma, Howard R.	UGMS

University:

Bleistein, Sandra	DU/DRI
Brookshire, David S.	WU
Culbertson, William J.	DU/DRI
Dickson, Philip F.	CSM
Gary, James H.	CSM
Gray, S. Lee	CSU
Jacobs, Harold R.	UU
Katell, Sidney	WVU
Sparling, Edward W.	Yale
Taylor, Graham C.	DU/DRI

Geology

Federal:

Ash, Henry O.	USDOI
Bates, Ed	USEPA/Ci
Bloomfield, Roger A.	USBM
Brady, Ray A.	USGS/AOSO
Butcher, Barry M.	USDOE/SL
Cashion, William	USGS/GD
Caudle, Rodney	USDOE/Car
Costin, Laurence S.	USDOE/SL
Dana, Peter	USDOE/LETC
Dean, Walter E.	USGS/GD
Desborough, George A.	USGS/GD
Donnell, John	USGS/GD
Dyni, John	USGS/GD
Feder, Gerald L.	USGS/WRD
Grady, Dennis E.	USDOE/SL
Hail, William	USGS/GD
Hawkins, James E.	USBM
Hayduk, Charles	USDOE/Car
Hoffman, Eric G.	USGS/AOSO
Holcomb, David J.	USDOE/SL
Horino, Frank G.	USBM
Johnson, Ronald C.	USGS/GD
Keighin, William	USGS/GD
Kimball, Briant	USGS/WRD
Lewis, Arthur E.	USDOE/LLL
Mann, John H.	BLM
McNeal, James M.	USGS/GD
Olsson, William A.	USDOE/SL
O'Sullivan, Robert	USGS/GD
Patt, Ralph	USGS/WRD
Pitman, Janet	USGS/GD
Smith, Margery	USGS/GD
Stead, Frank	USGS/GD
Utter, Stephen	USBM
Watkins, J. Wade	USDOE/FE
Youngberg, Alv Dan	USDOE/LETC
Zachara, John M.	USDOE/PNL
Zeigler, Timothy W.	USDOE/Car

State:

Goodier, John T.	WDEP
Ripzma, Howard R.	UGMS
Rold, John	CDNR

University:

Culbertson, William J.	DU/DRI
Haun, John D.	CSM
Hustrulid, William A.	CSM
Williams, Ralph E.	DU/DRI

Resource Characterization

Federal:

Adams, D. Briane	USGS/WRD
Barse, Joseph R.	USDA
Bates, Ed	USEPA/Ci
Brandenburg, Charles F.	USDOE/LETC
Branstetter, Barbara	USDOE/LBL
Breger, Irving A.	USGS
Campbell, John H.	USDOE/LLL
Haines, William E.	USDOE/LETC
Kash, Don E.	USGS/CD
Lailas, Nicholas	USDOE/RA

Lawlor, Dale L.	USDOE/LETC
Lukens, Larry A.	USDOE/RA
Neel, Robert R.	USDOE/SL
Norman, Vernon W.	USGS/WRD
Parrish, R. Leon	USDOE/SL
Rothberg, Paul F.	LOC
Rothman, Albert J.	USDOE/LLL
Smith, John Ward	USDOE/LETC
Spall, W. Dale	USDOE/LASL
Stuermer, Daniel H.	USDOE/LLL
Wagner, Paul	USDOE/LASL
Watkins, J. Wade	USDOE/FE
Weber, James	USDOE/LETC
Wheeler, P.E., Robert W.	NIOSH
Williams, Joel M.	USDOE/LASL

Local:

Siek, Robert D.	CERT

University:

Asplund, R. Owen	WU
Chong, Kenneth	WU
Culbertson, William J.	DU/DRI
Gary, James H.	CSM
Gray, S. Lee	CSU
Habenicht, Charles H.	DU/DRI
Hendricks, Lloyd J.	CSM
Howatson, John	WU
Katell, Sidney	WVU
Leopold, Estella B.	UW
Morse, Jerome G.	CSM
Noble, Richard D.	WU
Schmidt-Collerus, Josef J.	DU/DRI
Shaffron, Michael	DU/DRI

Chemical Analysis

Federal:

Ackerman, F. Jay	USDOE/LLL
Bloomfield, Roger A.	USBM
Brandenburg, Charles F.	USDOE/LETC
Branstetter, Barbara	USDOE/LBL
Braun, Robert L.	USDOE/LLL
Breger, Irving A.	USGS
Burnham, Alan K.	USDOE/LLL
Campbell, John H.	USDOE/LLL
Carley, James F.	USDOE/LLL
Cashion, William	USGS/GD
Chester, Stephen	NBS
Clark, Bruce R.	USDOE/ORNL
Dean, Walter E.	USGS/GD
Decora, Andrew W.	USDOE/LETC
Denny, Dale A.	USEPA/RTP
Desborough, George A.	USGS/GD
Docktor, Leroy	USDOE/LETC
Donnell, John	USGS/GD
Dyni, John	USGS/GD
Fish, Richard H.	USDOE/LBL
Fox, Phyllis	USDOE/LBL
Fruchter, Jonathan	USDOE/PNL
Galloway, Terry R.	USDOE/LLL
Girvin, Donald	USDOE/LBL
Gravatt, C. C.	NBS
Griest, Wayne H.	USDOE/ORNL
Grua, Charles	USDOE/EV
Guerin, Michael R.	USDOE/ORNL
Hail, William	USGS/GD
Haines, William E.	USDOE/LETC
Hanson, Ray L.	USDOE/ITRI
Hertz, Harry S.	NBS
Ho, C. H.	USDOE/ORNL
Hodgson, Alfred T.	USDOE/LBL
Johnson, Donald R.	USDOE/LETC
Johnson, Ronald C.	USGS/GD
Kland, Mathilde J.	USDOE/LBL
Lawlor, Dale L.	USDOE/LETC
Lewis, Arthur E.	USDOE/LLL
Lukens, Larry A.	USDOE/RA
Martel, Richard	USDOE/LETC
McNeal, James M.	USGS/GD
Mueller, Leonard H.	USEPA/Dul
Norman, Vernon W.	USGS/WRD
O'Sullivan, Robert	USGS/GD
Pelroy, Richard	USDOE/PNL
Raley, John H.	USDOE/LLL
Rubin, Ira B.	USDOE/ORNL
Sandholtz, Willis A.	USDOE/LLL
Smith, John Ward	USDOE/LETC
Smith, Margery	USGS/GD
Spall, W. Dale	USDOE/LASL
Stemmle, James T.	USEPA/IEEP
Stevens, Aldred L. (Al)	USDOE/SL
Tewes, Howard A.	USDOE/LLL
Thurnau, Robert C.	USEPA/Ci
Tichenor, Bruce A.	USEPA/RTP
Utter, Stephen	USBM
Wagner, Paul	USDOE/LASL
Ward, Raymond L.	USDOE/LLL
Weber, James	USDOE/LETC
Welder, Frank A.	USGS/WRD
Wheeler, P.E., Robert W.	NIOSH
Wieber, Paul R.	USDOE/FE
Wilkerson, Connie Lewis	USDOE/PNL
Williams, Joel M.	USDOE/LASL

University:

Asplund, R. Owen	WU
Crowl, Daniel A.	Wayne St.
Culbertson, William J.	DU/DRI
Gala, Kishor	DU/DRI
Gary, James H.	CSM
Habenicht, Charles H.	DU/DRI
Hendricks, Lloyd J.	CSM
Hill, George Richard	UU
Howatson, John	WU
Hurtubise, Robert J.	WU

Jacobs, Harold R.	UU
Katell, Sidney	WVU
Natusch, David S.	CSU
Noble, Richard D.	WU
Schmidt-Collerus, Josef J.	DU/DRI
Snyer, William H.	DU/DRI
Sohn, Hong Y.	UU
Taylor, David R.	CSU
Wallace, John R.	DU/DRI
Wildeman, Thomas R.	CSM
Yesavage, Victor F.	CSM

AIR-Emissions

Federal:

Anspaugh, Lynn R.	USDOE/LLL
Barnes, H. Michael	USEPA/RTP
Blaney, Benjamin L.	USEPA/Ci
Cawley, William A.	USEPA/Ci
Curnutt, Rocky	BLM
Daniels, Jeffrey I.	USDOE/LLL
Denny, Dale A.	USEPA/RTP
Fruchter, Jonathan	USDOE/PNL
Gehrers, Carl	USDOE/ORNL
Girvin, Donald	USDOE/LBL
Goldberg, Arnold J.	USDOE/EV
Golomb, Dan	USEPA/ORD
Goode, Bill	USDOE/Navy
Gottlieb, Myron	USDOE/EV
Hanson, Ray L.	USDOE/ITRI
Hodgson, Alfred T.	USDOE/LBL
Huffman, George L.	USEPA/Ci
Ichord, William	USDOE/EV
Ischinger, Lee S.	USFWS
Lailas, Nicholas	USDOE/RA
Lanier, W. Steven	USEPA/RTP
Lewis, Jr., Cecil D.	NPS
Long, George	BLM
Mallon, Richard G.	USDOE/LLL
Mills, Paul E.	USEPA/Ci
Monti, Dario	USDOE/EV
O'Brien, W. Jack	USDOE/Den
Ondov, John M.	USDOE/LLL
Paulson, Neil R.	USDA/FS
Poulton, Patricia Lynne	OTA
Ragaini, Richard C.	USDOE/LLL
Raley, John H.	USDOE/LLL
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Smith, David A.	USDOE/EV
Spall, W. Dale	USDOE/LASL
Tichenor, Bruce A.	USEPA/RTP
Tillery, Marvin	USDOE/LASL
Timourian, Hector	USDOE/LLL
Virgona, Joseph E.	USDOE/LETC
Wagner, William W.	BLM
Walsh, Robert T.	USEPA/OAQPS
Weber, James	USDOE/LETC
Welty, Carl	USDOE/EV
Wheeler, P.E., Robert W.	NIOSH
Wilkerson, Connie Lewis	USDOE/PNL
Williams, Ted	USDOE/EV
Zielinski, Walter L., Jr.	NBS

University:

Culbertson, William J.	DU/DRI
Davis, Alten B.	Weber St.
Gala, Kishor	DU/DRI
Habenicht, Charles H.	DU/DRI
Hines, Tony	CSM
Meglen, Robert R.	CU/CES
Morse, Jerome G.	CSM
Natusch, David S.	CSU
Nevens, Thomas	DU/DRI
Phillips, T. Terrence	WU
Shaffron, Michael	DU/DRI
Sievers, Robert	CU
Slinn, W. George N.	UW
Taylor, David R.	CSU
Veers, Val R.	CC

Meteorology

Federal:

Anspaugh, Lynn R.	USDOE/LLL
Blaney, Benjamin L.	USEPA/Ci
Fox, Douglas G.	USDA/FS
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Ischinger, Lee S.	USFWS
LaHue, Miles D.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Lamson, Kenneth C.	USDOE/LLL
Norman, Vernon W.	USGS/WRD
O'Brien, W. Jack	USDOE/Den
Paulson, Neil R.	USDA/FS
Pearson, Michael J.	USEPA/LV
Poulton, Patricia Lynne	OTA
Ragaini, Richard C.	USDOE/LLL
Silverman, Mark N.	USDOE/Den
Tucker, Roger A.	USGS/AOSO
Wagner, William W.	BLM
Williams, Ted	USDOE/EV

State:

Hennessey, Jr., Joseph P.	ODF

University:

Natusch, David S.	CSU
Slinn, W. George N.	UW
Veers, Val R.	CC

Modeling

Federal:

Anspaugh, Lynn R.	USDOE/LLL
Barnes, H. Michael	USEPA/RTP
Blaney, Benjamin L.	USEPA/Ci
Daniels, Jeffrey I.	USDOE/LLL
Durham, Jack L.	USEPA/RTP
Fox, Douglas G.	USDA/FS
Goldberg, Arnold J.	USDOE/EV
Golomb, Dan	USEPA/ORD
LaHue, Miles D.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Lamson, Kenneth C.	USDOE/LLL
Lewis, Jr., Cecil D.	NPS
O'Brien, W. Jack	USDOE/Den
Paulson, Neil R.	USDA/FS
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Tucker, Roger A.	USGS/AOSO
Wagner, William W.	BLM
Weber, James	USDOE/LETC
Williams, Ted	USDOE/EV

State:

Hennessey, Jr., Joseph P.	ODF

University:

Hines, Tony	CSM
Natusch, David S.	CSU
Shaffron, Michael	DU/DRI
Slinn, W. George N.	UW
Veers, Val R.	CC

Monitoring

Federal:

Barnes, H. Michael	USEPA/RTP
Curnutt, Rocky	BLM
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Gunter, Bobby J.	NIOSH
Ischinger, Lee S.	USFWS
Lailas, Nicholas	USDOE/RA
Lamson, Kenneth C.	USDOE/LLL
Lewis, Jr., Cecil D.	NPS
Long, George	BLM
Mills, Paul E.	USEPA/Ci
O'Brien, W. Jack	USDOE/Den
Ondov, John M.	USDOE/LLL
Paulson, Neil R.	USDA/FS
Pearson, Michael J.	USEPA/LV
Seibel, Richard	USBM
Silverman, Mark N.	USDOE/Den
Smith, David A.	USDOE/EV
Spall, W. Dale	USDOE/LASL
Stemmle, James T.	USEPA/IEEP
Tewes, Howard A.	USDOE/LLL
Virgona, Joseph E.	USDOE/LETC
Wagner, William W.	BLM
Weber, James	USDOE/LETC
Welty, Carl	USDOE/EV
Wheeler, P.E., Robert W.	NIOSH

State:

Hennessey, Jr., Joseph P.	ODF
Wood, Randolph	WDEQ

University:

Davis, Alten B.	Weber St.
Gala, Kishor	DU/DRI
Meglen, Robert R.	CU/CES
Natusch, David S.	CSU
Sievers, Robert	CU
Slinn, W. George N.	UW

Chemical Analysis

Federal:

Anspaugh, Lynn R.	USDOE/LLL
Barnes, H. Michael	USEPA/RTP
Daniels, Jeffrey I.	USDOE/LLL
Durham, Jack L.	USEPA/RTP
Fox, Phyllis	USDOE/LBL
Girvin, Donald	USDOE/LBL
Goldberg, Arnold J.	USDOE/EV
Goldstein, Gerald	USDOE/EV
Gravatt, C. C.	NBS
Grua, Charles	USDOE/EV
Gunter, Bobby J.	NIOSH
Hanson, Ray L.	USDOE/ITRI
Hertz, Harry S.	NBS
Hodgson, Alfred T.	USDOE/LBL
Lailas, Nicholas	USDOE/RA
Lamson, Kenneth C.	USDOE/LLL
Lanier, W. Steven	USEPA/RTP
McClendon, Lottie T.	NBS
Mills, Paul E.	USEPA/Ci
O'Brien, W. Jack	USDOE/Den
Ondov, John M.	USDOE/LLL
Pearson, Michael J.	USEPA/LV
Pelroy, Richard	USDOE/PNL
Poulson, Richard E.	USDOE/LETC
Ragaini, Richard C.	USDOE/LLL
Raley, John H.	USDOE/LLL
Silverman, Mark N.	USDOE/Den
Smith, David A.	USDOE/EV
Spall, W. Dale	USDOE/LASL
Stemmle, James T.	USEPA/IEEP
Tewes, Howard A.	USDOE/LLL
Thurnau, Robert C.	USEPA/Ci
Tichenor, Bruce A.	USEPA/RTP
Tompkins, Michael A.	USDOE/LLL
Wagner, William W.	BLM

Weber, James	USDOE/LETC
Wheeler, P.E., Robert W.	NIOSH
Wilkerson, Connie Lewis	USDOE/PNL
Zielinski, Jr., Walter L.	NBS
University:	
Culbertson, William J.	DU/DRI
Gala, Kishor	DU/DRI
Gale, Charles	DU/DRI
Habenicht, Charles H.	DU/DRI
Hurtubise, Robert J.	WU
Meglen, Robert R.	CU/CES
Natusch, David S.	CSU
Schmidt-Collerus, Josef J.	DU/DRI
Sievers, Robert	CU
Slinn, W. George N.	UW
Taylor, David R.	CSU
Wallace, John R.	DU/DRI

Pollution Control

Federal:	
Anspaugh, Lynn R.	USDOE/LLL
Barker, Lawrence K.	USGS/AOSO
Bates, Ed	USEPA/Ci
Bradley, Richard A.	USDOE/EV
Cawley, William A.	USEPA/Ci
Curnutt, Rocky	BLM
Daniels, Jeffrey I.	USDOE/LLL
Denny, Dale A.	USEPA/RTP
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Gottlieb, Myron	USDOE/EV
Grua, Charles	USDOE/EV
Gunter, Bobby J.	NIOSH
House, Peter	USDOE/EV
Huffman, George L.	USEPA/Ci
Ischinger, Lee S.	USFWS
Jakobson, Kurt	USEPA/ORD
LaHue, Miles D.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Lamson, Kenneth C.	USDOE/LLL
Lanier, W. Steven	USEPA/RTP
Lewis, Jr., Cecil D.	NPS
Long, George	BLM
Mallon, Richard G.	USDOE/LLL
Monti, Dario	USDOE/EV
Mott, William E.	USDOE/EV
O'Brien, W. Jack	USDOE/Den
Ondov, John M.	USDOE/LLL
Poulson, Richard E.	USDOE/LETC
Poulton, Patricia Lynne	OTA
Princiotta, Frank T.	USEPA/ORD
Ragaini, Richard C.	USDOE/LLL
Seibel, Richard	USBM
Shull, Roger D.	USDOE/EV
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Spall, W. Dale	USDOE/LASL
Thoem, Terry L.	USEPA/VIII
Thurnau, Robert C.	USEPA/Ci
Tichenor, Bruce A.	USEPA/RTP
Vegella, Thomas	NIOSH
Virgona, Joseph E.	USDOE/LETC
Wagner, William W.	BLM
Walsh, Robert T.	USEPA/OAQPS
Welty, Carl	USDOE/EV
Wheeler, P.E., Robert W.	NIOSH
State:	
Traylor, Frank A.	CDH
Wood, Randolph	WDEQ
University:	
Culbertson, William J.	DU/DRI
Davis, Alten B.	Weber St.
de Nevers, Noel	UU
Devine, Michael	OU
Gala, Kishor	DU/DRI
Gale, Charles	DU/DRI
Gary, James H.	CSM
Hines, Tony	CSM
Jovanovich, Andy	DU/DRI
Morse, Jerome G.	CSM
Natusch, David S.	CSU
Nevens, Thomas	DU/DRI
Phillips, T. Terrence	WU
Schmidt-Collerus, Josef J.	DU/DRI
Shaffron, Michael	DU/DRI
Slinn, W. George N.	UW
Veers, Val R.	CC

Impact Assessment

Federal:	
Anspaugh, Lynn R.	USDOE/LLL
Ash, Henry O.	USDOI
Barnes, H. Michael	USEPA/RTP
Bessinger, Glen	BLM
Blaney, Benjamin L.	USEPA/Ci
Bocker, Harold M.	USFWS
Brady, Ray A.	USGS/AOSO
Cawley, William A.	USEPA/Ci
Christianson, Alden G.	USEPA/Ci
Curnutt, Rocky	BLM
Daniels, Jeffrey I.	USDOE/LLL
Denny, Dale A.	USEPA/RTP
Durham, Jack L.	USEPA/RTP
Fox, Douglas G.	USDA/FS
Franklin, Ralph	USDOE/EV

Fruchter, Jonathan	USDOE/PNL
Gehrers, Carl	USDOE/ORNL
Goldberg, Arnold J.	USDOE/EV
Goldstein, Gerald	USDOE/EV
Goode, Bill	USDOE/Navy
Hertz, Harry S.	NBS
Hessel, Darryl L.	USDOE/PNL
Hoffman, Eric G.	USGS/AOSO
House, Peter	USDOE/EV
Ichord, William	USDOE/EV
Ischinger, Lee S.	USFWS
LaHue, Miles D.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Lamson, Kenneth C.	USDOE/LLL
Lewis, Jr., Cecil D.	NPS
Long, George	BLM
Malde, Harold E.	USGS
Monti, Dario	USDOE/EV
O'Brien, W. Jack	USDOE/Den
Ondov, John M.	USDOE/LLL
Pearson, Michael J.	USEPA/LV
Poulson, Richard E.	USDOE/LETC
Poulton, Patricia Lynne	OTA
Princiotta, Frank T.	USEPA/ORD
Ragaini, Richard C.	USDOE/LLL
Rotariu, George J.	USDOE/EV
Schottler, George R.	USBM
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Shull, Roger D.	USDOE/EV
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Smith, David A.	USDOE/EV
Thoem, Terry L.	USEPA/VIII
Thurnau, Robert C.	USEPA/Ci
Tichenor, Bruce A.	USEPA/RTP
Tillery, Marvin	USDOE/LASL
Tompkins, Michael A.	USDOE/LLL
Tucker, Roger A.	USGS/AOSO
Virgona, Joseph E.	USDOE/LETC
Wagner, William W.	BLM
Weber, James	USDOE/LETC
Williams, Ted	USDOE/EV
Zielinski, Walter L., Jr.	NBS

State:

Hennessey, Jr., Joseph P.	ODF
Traylor, Frank A.	CDH

University:

Brookshire, David S.	WU
Davis, Alten B.	Weber St.
de Nevers, Noel	UU
Devine, Michael	OU
Gale, Charles	DU/DRI
Meglen, Robert R.	CU/CES
Natusch, David S.	CSU
Shaffron, Michael	DU/DRI
Skinner, Quinton	WU
Slinn, W. George N.	UW
Veers, Val R.	CC

Permits & Regulation

Federal:

Barnes, H. Michael	USEPA/RTP
Blaney, Benjamin L.	USEPA/Ci
Curnutt, Rocky	BLM
Daniels, Jeffrey I.	USDOE/LLL
Durham, Jack L.	USEPA/RTP
Frietsch, III, William	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Ischinger, Lee S.	USFWS
Joseph, Todd M.	USEPA/OGC
Lailas, Nicholas	USDOE/RA
Lewis, Jr., Cecil D.	NPS
Long, George	BLM
Madsen, Lowell L.	USDOI
O'Brien, W. Jack	USDOE/Den
Ondov, John M.	USDOE/LLL
Poulton, Patricia Lynne	OTA
Rutledge, Peter A.	USGS/AOSO
Sedman, Charles B.	USEPA/OAQPS
Silverman, Mark N.	USDOE/Den
Thoem, Terry L.	USEPA/VIII
Tucker, Roger A.	USGS/AOSO
Virgona, Joseph E.	USDOE/LETC
Walsh, Robert T.	USEPA/OAQPS
Williams, Ted	USDOE/EV

State:

Rickers, Alvin E.	UDH

University:

Davis, Alten B.	Weber St.

WATER-Effluents

Federal:

Biesinger, Kenneth E.	USEPA/Dul
Blakey, James S.	USGS/WRD
Cawley, William A.	USEPA/Ci
Covay, Kenneth J.	USGS/WRD
Curnutt, Rocky	BLM
Farrier, David G.	USDOE/LETC
Feder, Gerald L.	USGS/WRD
Fish, Richard H.	USDOE/LBL
Gehrers, Carl	USDOE/ORNL
Goddard, Kimball E.	USGS/WRD

Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Gottlieb, Myron	USDOE/EV
Huffman, George L.	USEPA/Ci
Ichord, William	USDOE/EV
Ireland, Robert R.	USDOE/LLL
Ischinger, Lee S.	USFWS
Kilpatrick, Frederick	USGS/WRD
Kirby, Ron	USEPA/EGD
Kland, Mathilde J.	USDOE/LBL
Lailas, Nicholas	USDOE/RA
Leenheer, Jerry A.	USGS/WRD
Long, George	BLM
Lum, John	USEPA/EGD
Mallon, Richard G.	USDOE/LLL
Mills, Paul E.	USEPA/Ci
Monti, Dario	USDOE/EV
Mueller, Leonard H.	USEPA/Dul
O'Brien, W. Jack	USDOE/Den
Poulton, Patricia Lynne	OTA
Ragaini, Richard C.	USDOE/LLL
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Smith, David A.	USDOE/EV
Spall, W. Dale	USDOE/LASL
Stead, Frank	USGS/GD
Stewart, Bill M.	USBM
Struber, Harold	USGS/WRD
Surles, Terry	USDOE/Arg
Telliard, William A.	USEPA/EGD
Thomas, Robert W.	USEPA/Corv
Timourian, Hector	USDOE/LLL
Tobin, Robert L.	USGS/WRD
Virgona, Joseph E.	USDOE/LETC
Wagner, Paul	USDOE/LASL
Weber, James	USDOE/LETC
Welty, Carl	USDOE/EV

State:

McDonald, Bill	CDNR

University:

Ahern, John J.	WU
Bergman, Harold L.	WU
Chappell, Willard R.	CU
Davis, Alten B.	Weber St.
Gala, Kishor	DU/DRI
Habenicht, Charles H.	DU/DRI
Hines, Tony	CSM
Meglen, Robert R.	CU/CES
Morse, Jerome G.	CSM
Nevens, Thomas	DU/DRI
Probstein, Ronald F.	MIT
Schmidt-Collerus, Josef J.	DU/DRI
Sievers, Robert	CU
Skinner, Quinton	WU
Weaver, Glen D.	CSU
Wildeman, Thomas R.	CSM

Hydrology

Federal:

Adams, D. Briane	USGS/WRD
Bateman, Richard L.	USEPA/LV
Bates, Ed	USEPA/Ci
Blakey, James S.	USGS/WRD
Collins, Dannie L.	USGS/WRD
Covay, Kenneth J.	USGS/WRD
Curnutt, Rocky	BLM
Dana, Peter	USDOE/LETC
Davis, George H.	USGS
Dudley, Jr., William W.	USGS/WRD
Dutcher, Lee C.	USGS/WRD
Farrier, David G.	USDOE/LETC
Feder, Gerald L.	USGS/WRD
Fox, Phyllis	USDOE/LBL
Galli, Alfred A.	USEPA/OEPER
Goddard, Kimball E.	USGS/WRD
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Harris, Eugene F.	USEPA/Ci
Holmes, Walter F.	USGS/WRD
Ichord, William	USDOE/EV
Ischinger, Lee S.	USFWS
Kealy, Dan	USBM
Kilpatrick, Frederick	USGS/WRD
Kimball, Briant	USGS/WRD
Lailas, Nicholas	USDOE/RA
Leenheer, Jerry A.	USGS/WRD
Lindskov, Kenneth L.	USGS/WRD
Long, George	BLM
Lowham, Hugh W.	USGS/WRD
Mallon, Richard G.	USDOE/LLL
Mann, John H.	BLM
McMillion, Leslie G.	USEPA/LV
Miller, Glen A.	USGS/AOSO
Newport, Bob D.	USEPA/Ada
Nicholson, David E.	USBM
Norman, Vernon W.	USGS/WRD
O'Brien, W. Jack	USDOE/Den
Packer, Paul E.	USDA/FS
Patt, Ralph	USGS/WRD
Piver, Warren T.	NIH/NIEHS
Ragaini, Richard C.	USDOE/LLL
Robson, Stanley G.	USGS/WRD
Saulnier, George	USGS/WRD
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Silverman, Mark N.	USDOE/Den
Stead, Frank	USGS/GD
Taylor, O. James	USGS/WRD
Thomas, Robert W.	USEPA/Corv

Tobin, Robert L.	USGS/WRD
Tooley, John E.	USGS/WRD
Torpy, Michael F.	USDOE/Arg
Utter, Stephen	USBM
Virgona, Joseph E.	USDOE/LETC
Weber, James	USDOE/LETC
Welder, Frank A.	USGS/WRD
Welty, Carl	USDOE/EV
Youngberg, Alv Dan	USDOE/LETC
Zachara, John M.	USDOE/PNL

State:

Dildine, Evan D.	CDH/WQCD
Fischer, Roland C.	CRWC
Goodier, John T.	WDEP
Linke, Deborah M.	UWPRS
McDonald, Bill	CDNR
Roberts, Charles G.	CDH
Webb, Kenneth W.	CDH

University:

McWhorter, David B.	CSU
Nieuwenhuis, Carol A.	CU/CES
Shaffron, Michael	DU/DRI
Weaver, Glen D.	CSU

Availability & Usage

Federal:

Armour, Carl L.	USFWS
Barse, Joseph R.	USDA
Blakey, James S.	USGS/WRD
Boswell, Merlin N.	USDA/FS
Collins, Dannie L.	USGS/WRD
Curnutt, Rocky	BLM
Davis, George H.	USGS
Dudley, Jr., William W.	USGS/WRD
Dutcher, Lee C.	USGS/WRD
Feder, Gerald L.	USGS/WRD
Galli, Alfred A.	USEPA/OEPER
Gehrers, Carl	USDOE/ORNL
Goddard, Kimball E.	USGS/WRD
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Holmes, Walter F.	USGS/WRD
Ichord, William	USDOE/EV
Ischinger, Lee S.	USFWS
Kealy, Dan	USBM
Kilpatrick, Frederick	USGS/WRD
Kimball, Briant	USGS/WRD
Kinney, Wesley L.	USEPA/LV
Krug, Eugene P.	USDOE/EV
Lailas, Nicholas	USDOE/RA
Lindskov, Kenneth L.	USGS/WRD
Long, George	BLM
Lowham, Hugh W.	USGS/WRD
Mann, John H.	BLM
Miller, Glen A.	USGS/AOSO
O'Brien, W. Jack	USDOE/Den
Ragaini, Richard C.	USDOE/LLL
Robson, Stanley G.	USGS/WRD
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Stead, Frank	USGS/GD
Stewart, Bill M.	USBM
Surles, Terry	USDOE/Arg
Taylor, O. James	USGS/WRD
Thomas, Robert W.	USEPA/Corv
Tobin, Robert L.	USGS/WRD
Tompkins, Michael A.	USDOE/LLL
Torpy, Michael F.	USDOE/Arg
Welder, Frank A.	USGS/WRD
Williams, Ted	USDOE/EV

State:

Dildine, Evan D.	CDH/WQCD
Fischer, Roland C.	CRWC
Linke, Deborah M.	UWPRS
McDonald, Bill	CDNR

Local:

George, Robert D.	UBAG
Heitman, Ronald L.	UBAG

University:

Butler, Jackie D.	CSU
Davis, Alten B.	Weber St.
Gary, James H.	CSM
Gray, S. Lee	CSU
Hines, Tony	CSM
McWhorter, David B.	CSU
Nieuwenhuis, Carol A.	CU/CES
Noble, Richard D.	WU
Probstein, Ronald F.	MIT
Shaffron, Michael	DU/DRI
Sparling, Edward W.	Yale
Taylor, Graham C.	DU/DRI
Weaver, Glen D.	CSU
Whittlesey, Norman K.	WSU

Monitoring

Federal:

Armour, Carl L.	USFWS
Bateman, Richard L.	USEPA/LV
Blakey, James S.	USGS/WRD
Boswell, Merlin N.	USDA/FS
Collins, Dannie L.	USGS/WRD

Covay, Kenneth J.	USGS/WRD
Dietz, Donald R.	USFWS
Dudley, Jr., William W.	USGS/WRD
Dutcher, Lee C.	USGS/WRD
Feder, Gerald L.	USGS/WRD
Gilmore, Donald B.	USEPA/LV
Goddard, Kimball E.	USGS/WRD
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Holmes, Walter F.	USGS/WRD
Ischinger, Lee S.	USFWS
Kealy, Dan	USBM
Kilpatrick, Frederick	USGS/WRD
Kimball, Briant	USGS/WRD
Kinney, Wesley L.	USEPA/LV
Kirby, Ron	USEPA/EGD
Lailas, Nicholas	USDOE/RA
Lewis, Jr., Cecil D.	NPS
Lindskov, Kenneth L.	USGS/WRD
Lum, John	USEPA/EGD
Mann, John H.	BLM
McMillion, Leslie G.	USEPA/LV
Mills, Paul E.	USEPA/Ci
Norman, Vernon W.	USGS/WRD
O'Brien, W. Jack	USDOE/Den
Piver, Warren T.	NIH/NIEHS
Robson, Stanley G.	USGS/WRD
Seibel, Richard	USBM
Silverman, Mark N.	USDOE/Den
Smith, David A.	USDOE/EV
Spall, W. Dale	USDOE/LASL
Stead, Frank	USGS/GD
Stemmle, James T.	USEPA/IEEP
Struber, Harold	USGS/WRD
Taylor, O. James	USGS/WRD
Tewes, Howard A.	USDOE/LLL
Thomas, Robert W.	USEPA/Corv
Tobin, Robert L.	USGS/WRD
Tooley, John E.	USGS/WRD
Virgona, Joseph E.	USDOE/LETC
Weber, James	USDOE/LETC
Welder, Frank A.	USGS/WRD
Welty, Carl	USDOE/EV
Wheeler, P.E., Robert W.	NIOSH
Youngberg, Alv Dan	USDOE/LETC
Zachara, John M.	USDOE/PNL
State:	
Fischer, Roland C.	CRWC
Linke, Deborah M.	UWPRS
University:	
Ahern, John J.	WU
Bergman, Harold L.	WU
Bock, Jane H.	CU
Butler, Jackie D.	CSU
Davis, Alten B.	Weber St.
Gala, Kishor	DU/DRI
McWhorter, David B.	CSU
Meglen, Robert R.	CU/CES
Nieuwenhuis, Carol A.	CU/CES
Runnells, Donald D.	CU
Schmidt-Collerus, Josef J.	DU/DRI
Sievers, Robert	CU
Wildeman, Thomas R.	CSM

Chemical Analysis

Federal:	
Baughman, George L.	USEPA/Ath
Biesinger, Kenneth E.	USEPA/Dul
Blakey, James S.	USGS/WRD
Boswell, Merlin N.	USDA/FS
Dudley, Jr., William W.	USGS/WRD
Dutcher, Lee C.	USGS/WRD
Feder, Gerald L.	USGS/WRD
Fish, Richard H.	USDOE/LBL
Fox, Phyllis	USDOE/LBL
Gilmore, Donald B.	USEPA/LV
Goddard, Kimball E.	USGS/WRD
Goldberg, Arnold J.	USDOE/EV
Goldstein, Gerald	USDOE/EV
Gravatt, C. C.	NBS
Harris, Eugene F.	USEPA/Ci
Hertz, Harry S.	NBS
Holmes, Walter F.	USGS/WRD
Ireland, Robert R.	USDOE/LLL
Kilpatrick, Frederick	USGS/WRD
Kimball, Briant	USGS/WRD
Kinney, Wesley L.	USEPA/LV
Kirby, Ron	USEPA/EGD
Kland, Mathilde J.	USDOE/LBL
Lailas, Nicholas	USDOE/RA
Leenheer, Jerry A.	USGS/WRD
Lindskov, Kenneth L.	USGS/WRD
Lum, John	USEPA/EGD
McClendon, Lottie T.	NBS
McMillion, Leslie G.	USEPA/LV
McNeal, James M.	USGS/GD
Mills, Paul E.	USEPA/Ci
Mueller, Leonard H.	USEPA/Dul
Newport, Bob D.	USEPA/Ada
O'Brien, W. Jack	USDOE/Den
Patt, Ralph	USGS/WRD
Pelroy, Richard	USDOE/PNL
Poulson, Richard E.	USDOE/LETC
Ragaini, Richard C.	USDOE/LLL
Saulnier, George	USGS/WRD
Silverman, Mark N.	USDOE/Den

Smith, David A.	USDOE/EV
Spall, W. Dale	USDOE/LASL
Stead, Frank	USGS/GD
Stemmle, James T.	USEPA/IEEP
Struber, Harold	USGS/WRD
Stuermer, Daniel H.	USDOE/LLL
Taylor, O. James	USGS/WRD
Telliard, William A.	USEPA/EGD
Tewes, Howard A.	USDOE/LLL
Thomas, Robert W.	USEPA/Corv
Thurnau, Robert C.	USEPA/Ci
Tobin, Robert L.	USGS/WRD
Tompkins, Michael A.	USDOE/LLL
Tooley, John E.	USGS/WRD
Utter, Stephen	USBM
Wagner, Paul	USDOE/LASL
Wanek, Patsy Lee	USDOE/LASL
Weber, James	USDOE/LETC
Welder, Frank A.	USGS/WRD
Wewerka, Eugene Michael	USDOE/LASL
Wheeler, P.E., Robert W.	NIOSH
Wildung, Raymond E.	USDOE/PNL
Wilkerson, Connie Lewis	USDOE/PNL
Williams, Joel M.	USDOE/LASL
Zachara, John M.	USDOE/PNL

University:

Ahern, John J.	WU
Bergman, Harold L.	WU
Bock, Jane H.	CU
Butler, Jackie D.	CSU
Chappell, Willard R.	CU
Gala, Kishor	DU/DRI
Gale, Charles	DU/DRI
Habenicht, Charles H.	DU/DRI
Hines, Tony	CSM
Hurtubise, Robert J.	WU
McWhorter, David B.	CSU
Meglen, Robert R.	CU/CES
Natusch, David S.	CSU
Noble, Richard D.	WU
Probstein, Ronald F.	MIT
Runnells, Donald D.	CU
Schmidt-Collerus, Josef J.	DU/DRI
Sievers, Robert	CU
Wallace, John R.	DU/DRI
Wildeman, Thomas R.	CSM

Pollution Control

Federal:

Armour, Carl L.	USFWS
Bates, Ed	USEPA/Ci
Blakey, James S.	USGS/WRD
Boswell, Merlin N.	USDA/FS
Bradley, Richard A.	USDOE/EV
Cawley, William A.	USEPA/Ci
Collins, Dannie L.	USGS/WRD
Coulombe, Harry N.	USFWS
Covay, Kenneth J.	USGS/WRD
Curnutt, Rocky	BLM
Dudley, Jr., William W.	USGS/WRD
Dutcher, Lee C.	USGS/WRD
Farrier, David G.	USDOE/LETC
Feder, Gerald L.	USGS/WRD
Fox, Phyllis	USDOE/LBL
Goddard, Kimball E.	USGS/WRD
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Gottlieb, Myron	USDOE/EV
Grua, Charles	USDOE/EV
Holmes, Walter F.	USGS/WRD
House, Peter	USDOE/EV
Huffman, George L.	USEPA/Ci
Ischinger, Lee S.	USFWS
Jackson, Daniel	USDOE/LBL
Jakobson, Kurt	USEPA/ORD
Kilpatrick, Frederick	USGS/WRD
Kirby, Ron	USEPA/EGD
Lailas, Nicholas	USDOE/RA
Lassiter, Ray R.	USEPA/Ath
Lewis, Jr., Cecil D.	NPS
Lindsey, Fred	USEPA/OSW
Lindskov, Kenneth L.	USGS/WRD
Long, George	BLM
Lowham, Hugh W.	USGS/WRD
Lum, John	USEPA/EGD
Mallon, Richard G.	USDOE/LLL
Mann, John H.	BLM
Mills, Paul E.	USEPA/Ci
Monti, Dario	USDOE/EV
Mott, William E.	USDOE/EV
Nicholson, David E.	USBM
O'Brien, W. Jack	USDOE/Den
Packer, Paul E.	USDA/FS
Piver, Warren T.	NIH/NIEHS
Poulson, Richard E.	USDOE/LETC
Poulton, Patricia Lynne	OTA
Powers, Thomas J.	USEPA/Ci
Princiotta, Frank T.	USEPA/ORD
Ragaini, Richard C.	USDOE/LLL
Robson, Stanley G.	USGS/WRD
Seibel, Richard	USBM
Shull, Roger D.	USDOE/EV
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Spall, W. Dale	USDOE/LASL
Stead, Frank	USGS/GD
Stewart, Bill M.	USBM
Struber, Harold	USGS/WRD
Telliard, William A.	USEPA/EGD

Thomas, Robert W.	USEPA/Corv
Tobin, Robert L.	USGS/WRD
Torpy, Michael F.	USDOE/Arg
Virgona, Joseph E.	USDOE/LETC
Wanek, Patsy Lee	USDOE/LASL
Welty, Carl	USDOE/EV
Wewerka, Eugene Michael	USDOE/LASL
Williams, Joel M.	USDOE/LASL

State:

Dildine, Evan D.	CDH/WQCD
Fischer, Roland C.	CRWC
Traylor, Frank A.	CDH

University:

Bergman, Harold L.	WU
Bock, Jane H.	CU
Butler, Jackie D.	CSU
Davis, Alten B.	Weber St.
Devine, Michael	OU
Gala, Kishor	DU/DRI
Gale, Charles	DU/DRI
Hines, Tony	CSM
Jovanovich, Andy	DU/DRI
Linhart, Yan	CU
McWhorter, David B.	CSU
Morse, Jerome G.	CSM
Natusch, David S.	CSU
Nevens, Thomas	DU/DRI
Noble, Richard D.	WU
Probstein, Ronald F.	MIT
Runnells, Donald D.	CU
Schmidt-Collerus, Josef J.	DU/DRI
Shaffron, Michael	DU/DRI
Wildeman, Thomas R.	CSM

Impact Assessment

Federal:

Armour, Carl L.	USFWS
Ash, Henry O.	USDOI
Barse, Joseph R.	USDA
Bateman, Richard L.	USEPA/LV
Bates, Ed	USEPA/Ci
Baughman, George L.	USEPA/Ath
Bessinger, Glen	BLM
Biesinger, Kenneth E.	USEPA/Dul
Blakey, James S.	USGS/WRD
Bocker, Harold M.	USFWS
Boswell, Merlin N.	USDA/FS
Brady, Ray A.	USGS/AOSO
Cawley, William A.	USEPA/Ci
Christianson, Alden G.	USEPA/Ci
Collins, Dannie L.	USGS/WRD
Coulombe, Harry N.	USFWS
Covay, Kenneth J.	USGS/WRD
Curnutt, Rocky	BLM
Davis, George H.	USGS
Dietz, Donald R.	USFWS
Dudley, Jr., William W.	USGS/WRD
Dutcher, Lee C.	USGS/WRD
Farrier, David G.	USDOE/LETC
Feder, Gerald L.	USGS/WRD
Fish, Richard H.	USDOE/LBL
Fox, Phyllis	USDOE/LBL
Franklin, Ralph	USDOE/EV
Fruchter, Jonathan	USDOE/PNL
Galli, Alfred A.	USEPA/OEPER
Gehrers, Carl	USDOE/ORNL
Gilmore, Donald B.	USEPA/LV
Goddard, Kimball E.	USGS/WRD
Goldberg, Arnold J.	USDOE/EV
Goldstein, Gerald	USDOE/EV
Goode, Bill	USDOE/Navy
Grua, Charles	USDOE/EV
Harris, Eugene F.	USEPA/Ci
Hertz, Harry S.	NBS
Hessel, Darryl L.	USDOE/PNL
Hoffman, Eric G.	USGS/AOSO
Holmes, Walter F.	USGS/WRD
House, Peter	USDOE/EV
Ichord, William	USDOE/EV
Ireland, Robert R.	USDOE/LLL
Ischinger, Lee S.	USFWS
Kealy, Dan	USBM
Kilpatrick, Frederick	USGS/WRD
Kimball, Briant	USGS/WRD
Kinney, Wesley L.	USEPA/LV
Kland, Mathilde J.	USDOE/LBL
Lailas, Nicholas	USDOE/RA
Lassiter, Ray R.	USEPA/Ath
Leenheer, Jerry A.	USGS/WRD
Lewis, Jr., Cecil D.	NPS
Lindskov, Kenneth L.	USGS/WRD
Long, George	BLM
Lowham, Hugh W.	USGS/WRD
Malde, Harold E.	USGS
Mann, John H.	BLM
McMillion, Leslie G.	USEPA/LV
Miller, Glen A.	USGS/AOSO
Monti, Dario	USDOE/EV
Mueller, Leonard H.	USEPA/Dul
Newport, Bob D.	USEPA/Ada
O'Brien, W. Jack	USDOE/Den
Packer, Paul E.	USDA/FS
Patt, Ralph	USGS/WRD
Piver, Warren T.	NIH/NIEHS
Poulson, Richard E.	USDOE/LETC
Poulton, Patricia Lynne	OTA

Powers, Thomas J.	USEPA/Ci
Princiotta, Frank T.	USEPA/ORD
Ragaini, Richard C.	USDOE/LLL
Richards, Norman L.	USEPA/GB
Robson, Stanley G.	USGS/WRD
Rotariu, George J.	USDOE/EV
Russell, Peter Paul	USDOE/LBL
Saulnier, George	USGS/WRD
Schottler, George R.	USBM
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Shull, Roger D.	USDOE/EV
Silverman, Mark N.	USDOE/Den
Sladek, Thomas A.	OTA
Smith, David A.	USDOE/EV
Stead, Frank	USGS/GD
Struber, Harold	USGS/WRD
Stuermer, Daniel H.	USDOE/LLL
Surles, Terry	USDOE/Arg
Taylor, O. James	USGS/WRD
Thomas, Robert W.	USEPA/Corv
Thurnau, Robert C.	USEPA/Ci
Tobin, Robert L.	USGS/WRD
Tompkins, Michael A.	USDOE/LLL
Torpy, Michael F.	USDOE/Arg
Utter, Stephen	USBM
Virgona, Joseph E.	USDOE/LETC
Wagner, Paul	USDOE/LASL
Wanek, Patsy Lee	USDOE/LASL
Weber, James	USDOE/LETC
Welder, Frank A.	USGS/WRD
Wewerka, Eugene Michael	USDOE/LASL
Wildung, Raymond E.	USDOE/PNL
Williams, Ted	USDOE/EV
Youngberg, Alv Dan	USDOE/LETC
Zachara, John M.	USDOE/PNL

State:

Fischer, Roland C.	CRWC
Goodier, John T.	WDEP
Linke, Deborah M.	UWPRS
McDonald, Bill	CDNR
Traylor, Frank A.	CDH

University:

Bergman, Harold L.	WU
Bock, Jane H.	CU
Chappell, Willard R.	CU
Davis, Alten B.	Weber St.
de Nevers, Noel	UU
Devine, Michael	OU
Gale, Charles	DU/DRI
Gray, S. Lee	CSU
Linhart, Yan	CU
McWhorter, David B.	CSU
Meglen, Robert R.	CU/CES
Natusch, David S.	CSU
Nieuwenhuis, Carol A.	CU/CES
Runnells, Donald D.	CU
Schmidt-Collerus, Josef J.	DU/DRI
Shaffron, Michael	DU/DRI
Skinner, Quinton	WU
Sparling, Edward W.	Yale
Taylor, Graham C.	DU/DRI
Weaver, Glen D.	CSU
Wildeman, Thomas R.	CSM

Permits & Regulation

Federal:

Blakey, James S.	USGS/WRD
Curnutt, Rocky	BLM
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Ischinger, Lee S.	USFWS
Joseph, Todd M.	USEPA/OGC
Kirby, Ron	USEPA/EGD
Lailas, Nicholas	USDOE/RA
Lewis, Cecil D., Jr.	NPS
Long, George	BLM
Lum, John	USEPA/EGD
Madsen, Lowell L.	USDOI
Mann, John H.	BLM
O'Brien, W. Jack	USDOE/Den
Poulton, Patricia Lynne	OTA
Rutledge, Peter A.	USGS/AOSO
Silverman, Mark N.	USDOE/Den
Telliard, William A.	USEPA/EGD
Thoem, Terry L.	USEPA/VIII
Virgona, Joseph E.	USDOE/LETC
Williams, Ted	USDOE/EV

State:

Dildine, Evan D.	CDH/WQCD
Fischer, Roland C.	CRWC
McDonald, Bill	CDNR
Roberts, Charles G.	CDH
Rozich, Frank J.	CDH/WQCD
Shukle, Robert J.	CDH/WQCD
Sudweeks, Calvin K.	UDH
Wallum, P.E., Arden	CDH/WQCD
Webb, Kenneth W.	CDH

Local:

George, Robert D.	UBAG

University:

Bergman, Harold L.	WU
Davis, Alten B.	Weber St.

SOLID WASTE-Leaching & Subsidence

Federal:

Bateman, Richard L.	USEPA/LV
Bates, Ed	USEPA/Ci
Blakey, James S.	USGS/WRD
Bloomfield, Roger A.	USBM
Boswell, Merlin N.	USDA/FS
Cawley, William A.	USEPA/Ci
Dean, Walter E.	USGS/GD
Feder, Gerald L.	USGS/WRD
Ferguson, Robert B.	USDA/FS
Fox, Phyllis	USDOE/LBL
Frischknecht, Neil C.	USDA/FS
Galli, Alfred A.	USEPA/OEPER
Gehrers, Carl	USDOE/ORNL
Goldberg, Arnold J.	USDOE/EV
Gottlieb, Myron	USDOE/EV
Grua, Charles	USDOE/EV
Harris, Eugene F.	USEPA/Ci
Horino, Frank G.	USBM
Ischinger, Lee S.	USFWS
Joy, Charles E.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Lassiter, Ray R.	USEPA/Ath
Lawlor, Dale L.	USDOE/LETC
Lindsey, Fred	USEPA/OSW
Lum, John	USEPA/EGD
Mallon, Richard G.	USDOE/LLL
McBrumen, Roy	BLM
Mecham, Priscilla	BLM
Mercer, Mark	USEPA/OSW
Mills, Paul E.	USEPA/Ci
Newport, Bob D.	USEPA/Ada
Nicholson, David E.	USBM
Noll, Frank	BLM
O'Brien, W. Jack	USDOE/Den
Packer, Paul E.	USDA/FS
Persoff, Peter	USDOE/LBL
Piver, Warren T.	NIH/NIEHS
Poulton, Patricia Lynne	OTA
Ragaini, Richard C.	USDOE/LLL
Russell, Peter Paul	USDOE/LBL
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Smith, David A.	USDOE/EV
Stewart, Bill M.	USBM
Timourian, Hector	USDOE/LLL
Utter, Stephen	USBM
VanDerwalker, John G.	USFWS
Virgona, Joseph E.	USDOE/LETC
Weber, James	USDOE/LETC
Williams, Joel M.	USDOE/LASL
Zachara, John M.	USDOE/PNL

State:

Barry, III, Hamlet J.	CDNR
Pendleton, Jim	CDNR
Waesche, Ken	CDH/RHWCD
Webb, Kenneth W.	CDH

University:

Berg, W. A.	CSU
Chappell, Willard R.	CU
Culbertson, William J.	DU/DRI
Gala, Kishor	DU/DRI
Habenicht, Charles H.	DU/DRI
Hines, Tony	CSM
Hustrulid, William A.	CSM
Klusman, Ronald W.	CSM
Linhart, Yan	CU
McKell, Cyrus	USU
McWhorter, David B.	CSU
Meglen, Robert R.	CU/CES
Nevens, Thomas	DU/DRI
Nieuwenhuis, Carol A.	CU/CES
Peterson, Kathy	CU/CES
Schmidt-Collerus, Josef J.	DU/DRI
Shaffron, Michael	DU/DRI

Land Reclamation

Federal:

Bates, Ed	USEPA/Ci
Boswell, Merlin N.	USDA/FS
Cawley, William A.	USEPA/Ci
Curnutt, Rocky	BLM
Davis, Grant	USDA/FS
Dean, Walter E.	USGS/GD
Dickson, Frank	USDA/SCS
Dittberner, Phillip L.	USFWS
Ferguson, Robert B.	USDA/FS
Frischknecht, Neil C.	USDA/FS
Galli, Alfred A.	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Hassell, Wendell	USDA/SCS
Ichord, William	USDOE/EV
Ischinger, Lee S.	USFWS
Joy, Charles E.	USGS/AOSO
Kathman, David	BLM
Lailas, Nicholas	USDOE/RA
Lindsey, Fred	USEPA/OSW
Long, George	BLM
Mann, John H.	BLM
McBrumen, Roy	BLM
McGinnies, William J.	USDA
Mecham, Priscilla	BLM

Mills, Paul E.	USEPA/Ci
Moss, Dean	BLM
Noll, Frank	BLM
Oberwager, David	USGS/AOSO
O'Brien, W. Jack	USDOE/Den
Packer, Paul E.	USDA/FS
Pearson, Marvin	BLM
Poulton, Patricia Lynne	OTA
Roberts, Cecil M.	BLM
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Stewart, Bill M.	USBM
Utter, Stephen	USBM
VanDerwalker, John G.	USFWS
Virgona, Joseph E.	USDOE/LETC
Wildung, Raymond E.	USDOE/PNL
Williams, Ted	USDOE/EV
Zachara, John M.	USDOE/PNL

State:

Barry, III, Hamlet J.	CDNR
Massey, Dean R.	CDNR
Pendleton, Jim	CDNR
Shelton, David C.	CDMLR

Local:

Siek, Robert D.	CERT

University:

Berg, W. A.	CSU
Butler, Jackie D.	CSU
Chang, Nien-Yin	CU
Cook, Wayne	CSU
Culbertson, William J.	DU/DRI
Echols, James	CSU
Hyde, Robert	CSU
Linhart, Yan	CU
McKell, Cyrus	USU
McWhorter, David B.	CSU
Meglen, Robert R.	CU/CES
Redente, Edward	CSU
Skinner, Quinton	WU

Monitoring

Federal:

Bateman, Richard L.	USEPA/LV
Bates, Ed	USEPA/Ci
Curnutt, Rocky	BLM
Davis, Grant	USDA/FS
Frischknecht, Neil C.	USDA/FS
Gilmore, Donald B.	USEPA/LV
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Ischinger, Lee S.	USFWS
Joy, Charles E.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Lindsey, Fred	USEPA/OSW
Long, George	BLM
Lum, John	USEPA/EGD
Mann, John H.	BLM
McBrumen, Roy	BLM
Mecham, Priscilla	BLM
Mercer, Mark	USEPA/OSW
Mills, Paul E.	USEPA/Ci
Moss, Dean	BLM
Nicholson, David E.	USBM
O'Brien, W. Jack	USDOE/Den
Piver, Warren T.	NIH/NIEHS
Seibel, Richard	USBM
Smith, David A.	USDOE/EV
Stemmle, James T.	USEPA/IEEP
Tewes, Howard A.	USDOE/LLL
Virgona, Joseph E.	USDOE/LETC
Weber, James	USDOE/LETC
Welty, Carl	USDOE/EV
Wheeler, P.E., Robert W.	NIOSH

State:

Barry, III, Hamlet J.	CDNR
Pendleton, Jim	CDNR
Waesche, Ken	CDH/RHWCD

University:

Butler, Jackie D.	CSU
Cook, Wayne	CSU
Culbertson, William J.	DU/DRI
Gala, Kishor	DU/DRI
McWhorter, David B.	CSU
Meglen, Robert R.	CU/CES
Redente, Edward	CSU
Schmidt-Collerus, Josef J.	DU/DRI
Wildeman, Thomas R.	CSM

Chemical Analysis

Federal:

Bates, Ed	USEPA/Ci
Bloomfield, Roger A.	USBM
Boswell, Merlin N.	USDA/FS
Davis, Grant	USDA/FS
Dean, Walter E.	USGS/GD
Desborough, George A.	USGS/GD
Fox, Phyllis	USDOE/LBL
Frischknecht, Neil C.	USDA/FS
Gehrers, Carl	USDOE/ORNL
Gilmore, Donald B.	USEPA/LV
Goldberg, Arnold J.	USDOE/EV
Goldstein, Gerald	USDOE/EV
Gravatt, C. C.	NBS
Grua, Charles	USDOE/EV
Harris, Eugene F.	USEPA/Ci

Lailas, Nicholas	USDOE/RA
Lum, John	USEPA/EGD
McMillion, Leslie G.	USEPA/LV
McNeal, James M.	USGS/GD
Mills, Paul E.	USEPA/Ci
Newport, Bob D.	USEPA/Ada
O'Brien, W. Jack	USDOE/Den
Pelroy, Richard	USDOE/PNL
Persoff, Peter	USDOE/LBL
Piver, Warren T.	NIH/NIEHS
Poulson, Richard E.	USDOE/LETC
Ragaini, Richard C.	USDOE/LLL
Smith, David A.	USDOE/EV
Stemmle, James T.	USEPA/IEEP
Tewes, Howard A.	USDOE/LLL
Thurnau, Robert C.	USEPA/Ci
Utter, Stephen	USBM
Wagner, Paul	USDOE/LASL
Weber, James	USDOE/LETC
Wheeler, P.E., Robert W.	NIOSH
Wildung, Raymond E.	USDOE/PNL
Wilkerson, Connie Lewis	USDOE/PNL
Williams, Joel M.	USDOE/LASL
Zachara, John M.	USDOE/PNL

State:

Barry, Hamlet J., III	CDNR

University:

Butler, Jackie D.	CSU
Chappell, Willard R.	CU
Culbertson, William J.	DU/DRI
Gala, Kishor	DU/DRI
Gale, Charles	DU/DRI
Habenicht, Charles H.	DU/DRI
Hurtubise, Robert J.	WU
McWhorter, David B.	CSU
Meglen, Robert R.	CU/CES
Schmidt-Collerus, Josef J.	DU/DRI
Wallace, John R.	DU/DRI
Wildeman, Thomas R.	CSM

Pollution Control

Federal:

Bates, Ed	USEPA/Ci
Boswell, Merlin N.	USDA/FS
Bradley, Richard A.	USDOE/EV
Branstetter, Barbara	USDOE/LBL
Braun, Robert L.	USDOE/LLL
Cawley, William A.	USEPA/Ci
Curnutt, Rocky	BLM
Dickson, Frank	USDA/SCS
Dittberner, Phillip L.	USFWS
Ferguson, Robert B.	USDA/FS
Fox, Phyllis	USDOE/LBL
Frischknecht, Neil C.	USDA/FS
Garbe, Yvonne M.	USEPA/OSW
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Gottlieb, Myron	USDOE/EV
Grua, Charles	USDOE/EV
Hassell, Wendell	USDA/SCS
Horino, Frank G.	USBM
House, Peter	USDOE/EV
Ischinger, Lee S.	USFWS
Jackson, Daniel	USDOE/LBL
Jakobson, Kurt	USEPA/ORD
Joy, Charles E.	USGS/AOSO
Kathman, David	BLM
Lailas, Nicholas	USDOE/RA
Lindsey, Fred	USEPA/OSW
Long, George	BLM
Lum, John	USEPA/EGD
Mallon, Richard G.	USDOE/LLL
Mann, John H.	BLM
McGinnies, William J.	USDA
Mercer, Mark	USEPA/OSW
Mills, Paul E.	USEPA/Ci
Moss, Dean	BLM
Mott, William E.	USDOE/EV
Nicholson, David E.	USBM
Noll, Frank	BLM
O'Brien, W. Jack	USDOE/Den
Packer, Paul E.	USDA/FS
Persoff, Peter	USDOE/LBL
Piver, Warren T.	NIH/NIEHS
Poulson, Richard E.	USDOE/LETC
Poulton, Patricia Lynne	OTA
Princiotta, Frank T.	USEPA/ORD
Ragaini, Richard C.	USDOE/LLL
Seibel, Richard	USBM
Shull, Roger D.	USDOE/EV
Stewart, Bill M.	USBM
Utter, Stephen	USBM
VanDerwalker, John G.	USFWS
Virgona, Joseph E.	USDOE/LETC
Welty, Carl	USDOE/EV
Wheeler, P.E., Robert W.	NIOSH
Williams, Joel M.	USDOE/LASL

State:

Barry, III, Hamlet J.	CDNR
Pendleton, Jim	CDNR
Waesche, Ken	CDH/RHWCD

University:

Berg, W. A.	CSU
Butler, Jackie D.	CSU
Culbertson, William J.	DU/DRI
Devine, Michael	OU

Echols, James	CSU
Gala, Kishor	DU/DRI
Gale, Charles	DU/DRI
Hines, Tony	CSM
Hustrulid, William A.	CSM
Hyde, Robert	CSU
Jovanovich, Andy	DU/DRI
Klusman, Ronald W.	CSM
Linhart, Yan	CU
McKell, Cyrus	USU
McWhorter, David B.	CSU
Nevens, Thomas	DU/DRI
Schmidt-Collerus, Josef J.	DU/DRI
Shaffron, Michael	DU/DRI
Wildeman, Thomas R.	CSM

Impact Assessment

Federal:

Ash, Henry O.	USDOI
Bateman, Richard L.	USEPA/LV
Bates, Ed	USEPA/Ci
Bessinger, Glen	BLM
Blaney, Benjamin L.	USEPA/Ci
Bloomfield, Roger A.	USBM
Bocker, Harold M.	USFWS
Boswell, Merlin N.	USDA/FS
Brady, Ray A.	USGS/AOSO
Cawley, William A.	USEPA/Ci
Christianson, Alden G.	USEPA/Ci
Curnutt, Rocky	BLM
Davis, Grant	USDA/FS
Desborough, George A.	USGS/GD
Dietz, Donald R.	USFWS
Dittberner, Phillip L.	USFWS
Feder, Gerald L.	USGS/WRD
Ferguson, Robert B.	USDA/FS
Fox, Phyllis	USDOE/LBL
Franklin, Ralph	USDOE/EV
Fruchter, Jonathan	USDOE/PNL
Galli, Alfred A.	USEPA/OEPER
Gehrers, Carl	USDOE/ORNL
Gilmore, Donald B.	USEPA/LV
Goldberg, Arnold J.	USDOE/EV
Goldstein, Gerald	USDOE/EV
Goode, Bill	USDOE/Navy
Graff, Greg J.	BLM
Harris, Eugene F.	USEPA/Ci
Hessel, Darryl L.	USDOE/PNL
Hoffman, Eric G.	USGS/AOSO
Horino, Frank G.	USBM
House, Peter	USDOE/EV
Ichord, William	USDOE/EV
Ischinger, Lee S.	USFWS
Joy, Charles E.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Lassiter, Ray R.	USEPA/Ath
Lawlor, Dale L.	USDOE/LETC
Lindsey, Fred	USEPA/OSW
Long, George	BLM
Malde, Harold E.	USGS
Mann, John H.	BLM
McBrumen, Roy	BLM
McGinnies, William J.	USDA
McMillion, Leslie G.	USEPA/LV
McNeal, James M.	USGS/GD
Mecham, Priscilla	BLM
Moss, Dean	BLM
Newport, Bob D.	USEPA/Ada
Noll, Frank	BLM
O'Brien, W. Jack	USDOE/Den
Packer, Paul E.	USDA/FS
Persoff, Peter	USDOE/LBL
Piver, Warren T.	NIH/NIEHS
Poulson, Richard E.	USDOE/LETC
Poulton, Patricia Lynne	OTA
Princiotta, Frank T.	USEPA/ORD
Ragaini, Richard C.	USDOE/LLL
Rotariu, George J.	USDOE/EV
Russell, Peter Paul	USDOE/LBL
Schottler, George R.	USBM
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Shull, Roger D.	USDOE/EV
Smith, David A.	USDOE/EV
Stewart, Bill M.	USBM
Thurnau, Robert C.	USEPA/Ci
Utter, Stephen	USBM
VanDerwalker, John G.	USFWS
Virgona, Joseph E.	USDOE/LETC
Weber, James	USDOE/LETC
Wildung, Raymond E.	USDOE/PNL
Williams, Ted	USDOE/EV
Zachara, John M.	USDOE/PNL

State:

Garr, John M.	USL
Pendleton, Jim	CDNR
Waesche, Ken	CDH/RHWCD

University:

Chappell, Willard R.	CU
Cook, Wayne	CSU
Culbertson, William J.	DU/DRI
de Nevers, Noel	UU
Devine, Michael	OU
Gale, Charles	DU/DRI
Hustrulid, William A.	CSM
Klusman, Ronald W.	CSM
Leopold, Estella B.	UW
Linhart, Yan	CU

McKell, Cyrus	USU
McWhorter, David B.	CSU
Meglen, Robert R.	CU/CES
Peterson, Kathy	CU/CES
Redente, Edward	CSU
Schmidt-Collerus, Josef J.	DU/DRI
Shaffron, Michael	DU/DRI
Taylor, Graham C.	DU/DRI
Wildeman, Thomas R.	CSM

Permits & Regulation

Federal:

Curnutt, Rocky	BLM
Frietsch, III, William	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Goode, Bill	USDOE/Navy
Ischinger, Lee S.	USFWS
Joseph, Todd M.	USEPA/OGC
Joy, Charles E.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Lindsey, Fred	USEPA/OSW
Long, George	BLM
Lum, John	USEPA/EGD
Mann, John H.	BLM
McBrumen, Roy	BLM
Mercer, Mark	USEPA/OSW
Moss, Dean	BLM
Noll, Frank	BLM
O'Brien, W. Jack	USDOE/Den
Pearson, Marvin	BLM
Poulton, Patricia Lynne	OTA
Roberts, Cecil M.	BLM
Rutledge, Peter A.	USGS/AOSO
Thoem, Terry L.	USEPA/VIII
Virgona, Joseph E.	USDOE/LETC
Williams, Ted	USDOE/EV

State:

Barry, III, Hamlet J.	CDNR
Massey, Dean R.	CDNR
Pendleton, Jim	CDNR
Shelton, David C.	CDMLR
Waesche, Ken	CDH/RHWCD
Webb, Kenneth W.	CDH

University:

Cook, Wayne	CSU
Redente, Edward	CSU

HEALTH EFFECTS-Processing & Mining

Federal:

Attfield, Mike	NIOSH
Blair, M.D., Joseph R.	USDOE/EV
Coffin, V.M.D., David L.	USEPA/RTP
Costello, Joseph	NIOSH
Covay, Kenneth J.	USGS/WRD
Durand, Dick	MSHA
Epler, James L.	USDOE/ORNL
Ettinger, Harry J.	USDOE/LASL
Frischknecht, Neil C.	USDA/FS
Goldberg, Arnold J.	USDOE/EV
Griest, Wayne H.	USDOE/ORNL
Gunter, Bobby J.	NIOSH
Holland, J. Mike	USDOE/ORNL
Holland, Laurence Martin	USDOE/LASL
Joy, Charles E.	USGS/AOSO
Kealy, Dan	USBM
Krohlow, Faith	MSHA
Lailas, Nicholas	USDOE/RA
Lillian, Daniel	USDOE/EV
Mills, Paul E.	USEPA/Ci
O'Brien, W. Jack	USDOE/Den
Pallay, Barry	NIOSH
Pelroy, Richard	USDOE/PNL
Rao, T. K.	USDOE/ORNL
Rousa, Gerald	USEPA/ORD
Rudnick, Jon	USDOE/LASL
Schambra, Philip E.	NIH/NIEHS
Scroggin, Don G.	CEQ
Seibel, Richard	USBM
Smith, David A.	USDOE/EV
Spall, W. Dale	USDOE/LASL
Sutton, Glen	MSHA
Tillery, Marvin	USDOE/LASL
Vegella, Thomas	NIOSH
Voelz, M.D., George L.	USDOE/LASL
Wheeler, P.E., Robert W.	NIOSH
Yeatts, Jr., LeRoy B.	USDOE/ORNL

State:

Garr, John M.	USL

University:

King, Jeannette W.	DU/DRI
Melvin, Jr., Walter W.	CSU
Nieuwenhuis, Carol A.	CU/CES
Schmidt-Collerus, Josef J.	DU/DRI

Emissions & Wastes

Federal:

Attfield, Mike	NIOSH
Blair, M.D., Joseph R.	USDOE/EV
Coffin, V.M.D., David L.	USEPA/RTP
Dean, Walter E.	USGS/GD
Epler, James L.	USDOE/ORNL
Ettinger, Harry J.	USDOE/LASL
Frischknecht, Neil C.	USDA/FS
Goldberg, Arnold J.	USDOE/EV
Griest, Wayne H.	USDOE/ORNL
Hanson, Ray L.	USDOE/ITRI
Hatch, Frederick T.	USDOE/LLL
Holland, J. Mike	USDOE/ORNL
Holland, Laurence Martin	USDOE/LASL
Ireland, Robert R.	USDOE/LLL
Joy, Charles E.	USGS/AOSO
Kealy, Dan	USBM
Kland, Mathilde J.	USDOE/LBL
Lailas, Nicholas	USDOE/RA
Lillian, Daniel	USDOE/EV
Mallon, Richard G.	USDOE/LLL
Mazza, Carl	USEPA/OPTS
Mills, Paul E.	USEPA/Ci
Monti, Dario	USDOE/EV
O'Brien, W. Jack	USDOE/Den
Pallay, Barry	NIOSH
Pelroy, Richard	USDOE/PNL
Piver, Warren T.	NIH/NIEHS
Rao, T. K.	USDOE/ORNL
Richards, Norman L.	USEPA/GB
Rousa, Gerald	USEPA/ORD
Schambra, Philip E.	NIH/NIEHS
Scroggin, Don G.	CEQ
Smith, David A.	USDOE/EV
Tillery, Marvin	USDOE/LASL
Timourian, Hector	USDOE/LLL
Vegella, Thomas	NIOSH
Voelz, M.D., George L.	USDOE/LASL
Wagner, William W.	BLM
Wheeler, P.E., Robert W.	NIOSH
Yeatts, Jr., LeRoy B.	USDOE/ORNL

State:

Dildine, Evan D.	CDH/WQCD
Fischer, Roland C.	CRWC

University:

Bock, Jane H.	CU
Gala, Kishor	DU/DRI
King, Jeannette W.	DU/DRI
Klusman, Ronald W.	CSM
Linhart, Yan	CU
Melvin, Jr., Walter W.	CSU
Nieuwenhuis, Carol A.	CU/CES
Schmidt-Collerus, Josef J.	DU/DRI
Taylor, David R.	CSU
Wildeman, Thomas R.	CSM

Products

Federal:

Attfield, Mike	NIOSH
Clark, Bruce R.	USDOE/ORNL
Coffin, V.M.D., David L.	USEPA/RTP
Epler, James L.	USDOE/ORNL
Frischknecht, Neil C.	USDA/FS
Goldberg, Arnold J.	USDOE/EV
Griest, Wayne H.	USDOE/ORNL
Guerin, Michael R.	USDOE/ORNL
Hatch, Frederick T.	USDOE/LLL
Ho, C. 2.-h.	USDOE/ORNL
Holland, J. Mike	USDOE/ORNL
Holland, Laurence Martin	USDOE/LASL
Lailas, Nicholas	USDOE/RA
Lamson, Kenneth C.	USDOE/LLL
Lillian, Daniel	USDOE/EV
Mazza, Carl	USEPA/OPTS
Mills, Paul E.	USEPA/Ci
O'Brien, W. Jack	USDOE/Den
Pallay, Barry	NIOSH
Pelroy, Richard	USDOE/PNL
Rao, T. K.	USDOE/ORNL
Richards, Norman L.	USEPA/GB
Rousa, Gerald	USEPA/ORD
Rubin, Ira B.	USDOE/ORNL
Schambra, Philip E.	NIH/NIEHS
Scroggin, Don G.	CEQ
Smith, David A.	USDOE/EV
Tillery, Marvin	USDOE/LASL
Timourian, Hector	USDOE/LLL
Vegella, Thomas	NIOSH
Wheeler, P.E., Robert W.	NIOSH
Witschi, Hanspeter	USDOE/ORNL
Yeatts, LeRoy B., Jr.	USDOE/ORNL

University:

Bock, Jane H.	CU
Gala, Kishor	DU/DRI
King, Jeannette W.	DU/DRI
Melvin, Jr., Walter W.	CSU
Natusch, David S.	CSU
Nieuwenhuis, Carol A.	CU/CES
Schmidt-Collerus, Josef J.	DU/DRI
Wildeman, Thomas R.	CSM

ENVIRONMENT-OTHER-Ecology & Wildlife

Federal:

Dean, Walter E.	USGS/GD
Miller, Wendy L.	USDA/FS
Norman, Vernon W.	USGS/WRD

University:

Weaver, Glen D.	CSU

Socioeconomics

Federal:

Gale, Barry G.	USDOE/RA
Mangeng, Carolyn A.	USDOE/LASL

State:

Hecox, Walter E.	CDNR

University:

Cortese, Charles	DU

REGULATION-Air

Federal:

Allen, Frederick W.	USEPA/OPM
Barnes, H. Michael	USEPA/RTP
Blaney, Benjamin L.	USEPA/Ci
Curnutt, Rocky	BLM
Daniels, Jeffrey I.	USDOE/LLL
Durham, Jack L.	USEPA/RTP
Frietsch, III, William	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Joseph, Todd M.	USEPA/OGC
Kozlowski, Richard G.	USEPA/OE
Lailas, Nicholas	USDOE/RA
Long, George	BLM
Madsen, Lowell L.	USDOI
Moss, Dean	BLM
Nelson, Robert H.	USDOE/RA
O'Brien, W. Jack	USDOE/Den
Pearson, Michael J.	USEPA/LV
Sandell, Edward T.	USGS/AOSO
Scroggin, Don G.	CEQ
Sedman, Charles B.	USEPA/OAQPS
Thoem, Terry L.	USEPA/VIII
Tucker, Roger A.	USGS/AOSO
Tundermann, David W.	USEPA/OPM
Walsh, Robert T.	USEPA/OAQPS
Walter, David J.	BLM
Wheeler, P.E., Robert W.	NIOSH
Williams, Ted	USDOE/EV

State:

Bishard, P.E., A. C.	CDH/SSP
Feight, Cleon E.	UDNR
Millar, Rod	UEO
Rickers, Alvin E.	UDH
Wood, Randolph	WDEQ

Water

Federal:

Allen, Frederick W.	USEPA/OPM
Curnutt, Rocky	BLM
Galli, Alfred A.	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Joseph, Todd M.	USEPA/OGC
Kirby, Ron	USEPA/EGD
Kozlowski, Richard G.	USEPA/OE
Lailas, Nicholas	USDOE/RA
Long, George	BLM
Lowham, Hugh W.	USGS/WRD
Lum, John	USEPA/EGD
Madsen, Lowell L.	USDOI
McBrumen, Roy	BLM
Moss, Dean	BLM
Nelson, Robert H.	USDOE/RA
O'Brien, W. Jack	USDOE/Den
Sandell, Edward T.	USGS/AOSO
Scroggin, Don G.	CEQ
Taylor, O. James	USGS/WRD
Telliard, William A.	USEPA/EGD
Thoem, Terry L.	USEPA/VIII
Tundermann, David W.	USEPA/OPM
Walter, David J.	BLM
Wheeler, P.E., Robert W.	NIOSH
Williams, Ted	USDOE/EV

State:

Feight, Cleon E.	UDNR
Millar, Rod	UEO
Roberts, Charles G.	CDH
Rozich, Frank J.	CDH/WQCD
Shukle, Robert J.	CDH/WQCD
Sudweeks, Calvin K.	UDH
Wallum, P.E., Arden	CDH/WQCD
Webb, Kenneth W.	CDH

Local:

George, Robert D.	UBAG
Kring, R. Lynn	CWACG

University:

Schmidt-Collerus, Josef J.	DU/DRI

Solid Waste

Federal:

Allen, Frederick W.	USEPA/OPM
Bates, Ed	USEPA/Ci
Blaney, Benjamin L.	USEPA/Ci
Curnutt, Rocky	BLM
Galli, Alfred A.	USEPA/OEPER

Garbe, Yvonne M.	USEPA/OSW
Goldberg, Arnold J.	USDOE/EV
Graff, Greg J.	BLM
Joseph, Todd M.	USEPA/OGC
Kozlowski, Richard G.	USEPA/OE
Lailas, Nicholas	USDOE/RA
Long, George	BLM
Lum, John	USEPA/EGD
McBrumen, Roy	BLM
Mercer, Mark	USEPA/OSW
Moss, Dean	BLM
Nelson, Robert H.	USDOE/RA
O'Brien, W. Jack	USDOE/Den
Sandell, Edward T.	USGS/AOSO
Scroggin, Don G.	CEQ
Thoem, Terry L.	USEPA/VIII
Tundermann, David W.	USEPA/OPM
Walter, David J.	BLM
Wheeler, P.E., Robert W.	NIOSH
Williams, Ted	USDOE/EV

State:

Feight, Cleon E.	UDNR
Massey, Dean R.	CDNR
McDonald, Bill	CDNR
Millar, Rod	UEO
Pendleton, Jim	CDNR
Shelton, David C.	CDMLR
Waesche, Ken	CDH/RHWCD

University:

Schmidt-Collerus, Josef J.	DU/DRI

Land Use

Federal:

Andrus, Dale R.	BLM
Curlin, James W.	USDOI
Curnutt, Rocky	BLM
Frietsch, III, William	USEPA/OEPER
Goldberg, Arnold J.	USDOE/EV
Graff, Greg J.	BLM
Hager, James W.	USGS/AOSO
Kash, Don E.	USGS/CD
Kathman, David	BLM
LaHue, Miles D.	USGS/AOSO
Lailas, Nicholas	USDOE/RA
Madsen, Lowell L.	USDOI
McBrumen, Roy	BLM
Miller, Glen A.	USGS/AOSO
Miller, Wendy L.	USDA/FS
Moorhead, Richard J.	BLM
Moss, Dean	BLM
Nelson, Robert H.	USDOE/RA
Noll, Frank	BLM
Oberwager, David	USGS/AOSO
O'Brien, W. Jack	USDOE/Den
Paulson, Neil R.	USDA/FS
Pearson, Marvin	BLM
Roberts, Cecil M.	BLM
Robinson, Phillip L.	OTA
Rutledge, Peter A.	USGS/AOSO
Sandell, Edward T.	USGS/AOSO
Schwengels, Paul F.	USEPA/ORD
Scroggin, Don G.	CEQ
Walter, David J.	BLM
Williams, Ted	USDOE/EV

State:

Dinehart, William K.	UDSL
Feight, Cleon E.	UDNR
Henderson, Charles R.	UDNR
Martin, Joan	CERI
Massey, Dean R.	CDNR
Millar, Rod	UEO
Pendleton, Jim	CDNR
Prince, Donald G.	UDSL
Ripzma, Howard R.	UGMS
Rold, John	CDNR
Shelton, David C.	CDMLR

Local:

Albers, Maxine	Mesa Cty
Baldwin, Ray	Grfld Cty
Brand, Annette A.	Silt
Demos, Bob	CWACG
Deppe, Daniel W.	Rifle
Downer, Wallace G.	Fruita
Flewelling, Richard A.	Carbondale
Heitman, Ronald L.	UBAG
Johnson, John W.	CWACG
Lollar, Cecil E.	Rangely
Mattivi, Pete	New Castle
McDaniel, Floyd E.	Grd Vly
Merkel, Lee D.	Rifle
Mitchell, George E.	Rifle
Schultz, Timothy W.	Rio Bl Cty
Shultz, Claude E.	Meeker
Smith, Marian I.	Glwd Spgs
Thompson, Jerry Leonard	Craig

University:

Cook, Wayne	CSU
Redente, Edward	CSU

Products

Federal:

Daniels, Jeffrey I.	USDOE/LLL
Goldberg, Arnold J.	USDOE/EV
Kozlowski, Richard G.	USEPA/OE
Lailas, Nicholas	USDOE/RA
Mazza, Carl	USEPA/OPTS

O'Brien, W. Jack	USDOE/Den
Sandell, Edward T.	USGS/AOSO
Scroggin, Don G.	CEQ
Tundermann, David W.	USEPA/OPM
Williams, Ted	USDOE/EV

Worker Health & Safety

Federal:

Attfield, Mike	NIOSH
Blair, M.D., Joseph R.	USDOE/EV
Costello, Joseph	NIOSH
Daniels, Jeffrey I.	USDOE/LLL
Durand, Dick	MSHA
Goldberg, Arnold J.	USDOE/EV
Gunter, Bobby J.	NIOSH
Krohlow, Faith	MSHA
Lailas, Nicholas	USDOE/RA
Lillian, Daniel	USDOE/EV
O'Brien, W. Jack	USDOE/Den
Pallay, Barry	NIOSH
Sandell, Edward T.	USGS/AOSO
Scroggin, Don G.	CEQ
Sutton, Glen	MSHA
Wheeler, P.E., Robert W.	NIOSH
Williams, Ted	USDOE/EV

State:

Garr, John M.	USL

Local:

Siek, Robert D.	CERT

University:

Melvin, Jr., Walter W.	CSU
Snyer, William H.	DU/DRI
Williams, Ralph E.	DU/DRI

Monitoring & Enforcement

Federal:

Andrus, Dale R.	BLM
Brewer, George F.	USDOT
Daniels, Jeffrey I.	USDOE/LLL
Goldberg, Arnold J.	USDOE/EV
Hager, James W.	USGS/AOSO
Kozlowski, Richard G.	USEPA/OE
Krohlow, Faith	MSHA
Lailas, Nicholas	USDOE/RA
Lewis, Jr., Cecil D.	NPS
Lillian, Daniel	USDOE/EV
Lum, John	USEPA/EGD
Madsen, Lowell L.	USDOI
McBrumen, Roy	BLM
Miller, Wendy L.	USDA/FS
Moss, Dean	BLM
Oberwager, David	USGS/AOSO
O'Brien, W. Jack	USDOE/Den
Paulson, Neil R.	USDA/FS
Pearson, Michael J.	USEPA/LV
Roberts, Cecil M.	BLM
Sandell, Edward T.	USGS/AOSO
Scroggin, Don G.	CEQ
Taylor, O. James	USGS/WRD
Thoem, Terry L.	USEPA/VIII
Walter, David J.	BLM
Wheeler, P.E., Robert W.	NIOSH

State:

Bishard, P.E., A. C.	CDH/SSP
Feight, Cleon E.	UDNR
Henderson, Charles R.	UDNR
Rozich, Frank J.	CDH/WQCD
Shukle, Robert J.	CDH/WQCD
Waesche, Ken	CDH/RHWCD
Wood, Randolph	WDEQ

Local:

Johnson, John W.	CWACG
Siek, Robert D.	CERT

University:

Schmidt-Collerus, Josef J.	DU/DRI

Permitting

Federal:

Brewer, George F.	USDOT
Curnutt, Rocky	BLM
Goldberg, Arnold J.	USDOE/EV
Graff, Greg J.	BLM
Hager, James W.	USGS/AOSO
Kash, Don E.	USGS/CD
Kozlowski, Richard G.	USEPA/OE
Lailas, Nicholas	USDOE/RA
Long, George	BLM
Madsen, Lowell L.	USDOI
McBrumen, Roy	BLM
Moorhead, Richard J.	BLM
Moss, Dean	BLM
Noll, Frank	BLM
Noll, William L.	USDOE/Den
O'Brien, W. Jack	USDOE/Den
Pearson, Marvin	BLM
Petzrick, Paul A.	USDOE/RA
Roberts, Cecil M.	BLM
Robinson, Phillip L.	OTA
Rutledge, Peter A.	USGS/AOSO
Sandell, Edward T.	USGS/AOSO
Telliard, William A.	USEPA/EGD
Thoem, Terry L.	USEPA/VIII
Tucker, Roger A.	USGS/AOSO

Tundermann, David W.	USEPA/OPM
Walter, David J.	BLM
Williams, Ted	USDOE/EV

State:

Bishard, P.E., A. C.	CDH/SSP
Feight, Cleon E.	UDNR
Garr, John M.	USL
Martin, Joan	CERI
Massey, Dean R.	CDNR
Pendleton, Jim	CDNR
Prince, Donald G.	UDSL
Rickers, Alvin E.	UDH
Ripzma, Howard R.	UGMS
Roberts, Charles G.	CDH
Rold, John	CDNR
Rozich, Frank J.	CDH/WQCD
Shelton, David C.	CDMLR
Shukle, Robert J.	CDH/WQCD
Sudweeks, Calvin K.	UDH
Wallum, P.E., Arden	CDH/WQCD
Webb, Kenneth W.	CDH
Wood, Randolph	WDEQ

Local:

Albers, Maxine	Mesa Cty
Baldwin, Ray	Grfld Cty
Brand, Annette A.	Silt
Deppe, Daniel W.	Rifle
Downer, Wallace G.	Fruita
Flewelling, Richard A.	Carbondale
George, Robert D.	UBAG
Heitman, Ronald L.	UBAG
Lollar, Cecil E.	Rangely
Mattivi, Pete	New Castle
McDaniel, Floyd E.	Grd Vly
Merkel, Lee D.	Rifle
Mitchell, George E.	Rifle
Schultz, Timothy W.	Rio Bl Cty
Shultz, Claude E.	Meeker
Siek, Robert D.	CERT
Smith, Marian I.	Glwd Spgs
Thompson, Jerry Leonard	Craig

Standard Setting

Federal:

Allen, Frederick W.	USEPA/OPM
Andrus, Dale R.	BLM
Attfield, Mike	NIOSH
Barnes, H. Michael	USEPA/RTP
Blaney, Benjamin L.	USEPA/Ci
Bradley, Richard A.	USDOE/EV
Curlin, James W.	USDOI
Daniels, Jeffrey I.	USDOE/LLL
Durham, Jack L.	USEPA/RTP
Frietsch, III, William	USEPA/OEPER
Galli, Alfred A.	USEPA/OEPER
Garbe, Yvonne M.	USEPA/OSW
Goldberg, Arnold J.	USDOE/EV
Jakobson, Kurt	USEPA/ORD
Joseph, Todd M.	USEPA/OGC
Kash, Don E.	USGS/CD
Kirby, Ron	USEPA/EGD
Kozlowski, Richard G.	USEPA/OE
Krohlow, Faith	MSHA
Lailas, Nicholas	USDOE/RA
Lewis, Arthur E.	USDOE/LLL
Lewis, Jr., Cecil D.	NPS
Lillian, Daniel	USDOE/EV
Lum, John	USEPA/EGD
Mazza, Carl	USEPA/OPTS
McBrumen, Roy	BLM
Moss, Dean	BLM
Nelson, Robert H.	USDOE/RA
Oberwager, David	USGS/AOSO
O'Brien, W. Jack	USDOE/Den
Pallay, Barry	NIOSH
Princiotta, Frank T.	USEPA/ORD
Roberts, Cecil M.	BLM
Robinson, Phillip L.	OTA
Sandell, Edward T.	USGS/AOSO
Schwengels, Paul F.	USEPA/ORD
Scroggin, Don G.	CEQ
Sedman, Charles B.	USEPA/OAQPS
Shull, Roger D.	USDOE/EV
Telliard, William A.	USEPA/EGD
Thoem, Terry L.	USEPA/VIII
Tundermann, David W.	USEPA/OPM
Wagner, Martin	USEPA/PPD
Walsh, Robert T.	USEPA/OAQPS
Walter, David J.	BLM
Wheeler, P.E., Robert W.	NIOSH

State:

Feight, Cleon E.	UDNR
Garr, John M.	USL
McDonald, Bill	CDNR
Millar, Rod	UEO
Prince, Donald G.	UDSL
Ripzma, Howard R.	UGMS
Rold, John	CDNR
Rozich, Frank J.	CDH/WQCD
Shelton, David C.	CDMLR
Shukle, Robert J.	CDH/WQCD
Sudweeks, Calvin K.	UDH
Wallum, P.E., Arden	CDH/WQCD
Wood, Randolph	WDEQ

Local:

Baldwin, Ray	Grfld Cty
George, Robert D.	UBAG
Kring, R. Lynn	CWACG

University:

Cook, Wayne	CSU
de Nevers, Noel	UU
Melvin, Jr., Walter W.	CSU
Redente, Edward	CSU

LOCAL GOVERNMENT

Colorado:

Aex, Paul	
Albers, Maxine	Mesa Cty
Baldwin, Ray	Grfld Cty
Batt, Ron	
Beard, William L.	
Bentrott, Jerry	
Bordson, Mark	
Brand, Annette A.	Silt
Brennan, C. W.	
Campbell, Jerri	
Carpenter, Sr., Joe R.	
Cerise, Flaven	
Choate, Vicki	
Clark, Daniel	
Collins, Kay	DPL
Cook, Elmo A.	
Cooper, Donald B.	
Copeland, Thomas W.	
Demos, Bob	CWACG
Deppe, Daniel W.	Rifle
Downer, Wallace G.	Fruita
Enstrom, Rick	
Flewelling, Richard A.	Carbondale
Fuller, Jr., Frank	
Hartzler, Harvey	
Hollingsworth, Dale	
Holmgren, Charles	
Hughes, Constance M.	
Humble, Warren	
Johnson, John W.	CWACG
Johnson, Ronald R.	
Jolley, Richard	
Kelly, Wayne	
King, Robert	
Kring, R. Lynn	CWACG
Kubin, Laurel	
LeFevre, Tom	
Lollar, Cecil E.	Rangely
Macy, John	
Mattivi, Pete	New Castle
McDaniel, Floyd E.	Grd Vly
McDaniel, Russell	
Merkel, Lee D.	Rifle
Meyer, Kelly	
Mitchell, George E.	Rifle
Nall, Gary	
Pankonin, P.E., Jim	
Peercy, Dorothy	
Penlend, Patty	
Rains, Charles A.	
Rehborg, Duane L.	Rio Blanco
Schultz, Timothy W.	Rio Bl Cty
Shelton, Judith Lee	
Sherwin, Hoyt	
Short, Geraldine	
Shultz, Claude E.	Meeker
Siek, Robert D.	CERT
Sims, Dennis	
Smith, Marian I.	Glwd Spgs
Sorenson, Russ	
Tayyara, Saed	
Thompson, Jerry Leonard	Craig
Trevenen, Claudia	
Velasquez, Larry	
Wahlberg, Carl	
Wilson, Beverly	
Wright, Helen	
Young, Robert	
Zastrow, Ronald	

Utah:

George, Robert D.	UBAG
Heitman, Ronald L.	UBAG
Murray, Thomas M.	UBAG

Wyoming:

ORGANIZATION INDEX

FEDERAL

U.S. DEPARTMENT OF AGRICULTURE

Washington, DC

Barse, Joseph R.

Forest Service

Paulson, Neil R.

Field Components

McGinnies, William J.

Forest Service

Boswell, Merlin N.
Davis, Grant
Ferguson, Robert B.
Fox, Douglas G.
Frischknecht, Neil C.

Miller, Wendy L.
Packer, Paul E.

Soil Conservation Service

Dickson, Frank
Hassell, Wendell

U.S. DEPARTMENT OF COMMERCE

U.S. National Bureau of Standards

Chester, Stephen
Gravatt, C. C.
Hertz, Harry S.
McClendon, Lottie T.
Zielinski, Jr., Walter L.

CONGRESS OF THE UNITED STATES

Office of Technology Assessment

Davis, William E.
Poulton, Patricia Lynne
Robinson, Phillip L.
Sladek, Thomas A.

EXECUTIVE OFFICE OF THE PRESIDENT

Council on Environmental Quality

Scroggin, Don G.

NATIONAL INSTITUTE OF HEALTH

National Institute of Environmental Health Sciences

Piver, Warren T.
Schambra, Philip E.

U.S. DEPARTMENT OF ENERGY

Washington, DC

Office of Environment

Blair, M.D., Joseph R.
Bradley, Richard A.
Franklin, Ralph
Goldberg, Arnold J.
Goldstein, Gerald

Gottlieb, Myron
Grua, Charles
House, Peter
Ichord, William
Krug, Eugene P.

Lillian, Daniel
Monti, Dario
Mott, William E.
Rotariu, George J.
Shull, Roger D.

Smith, David A.
Welty, Carl
Williams, Ted

Office of Fossil Energy

Hartstein, Art
Ramsey, Jerry W.
Thomas, Harold E.
Watkins, J. Wade
Wieber, Paul R.

Office of Resource Applications

Davis, Ruth M.
Gale, Barry G.
Halow, Mary
Harney, Brian M.
Lailas, Nicholas

Langenkamp, R. Dobie
Lukens, Larry A.
Nelson, Robert H.
Petzrick, Paul A.
Sheerin, John C.

Zukor, Stephen H.

Policy and Evaluation

Dionne, Jane

Field Components

Argonne National Laboratory

Santini, Danilo
Surles, Terry
Torpy, Michael F.

Carbondale Mining Technology Center

Caudle, Rodney
Hayduk, Charles
Zeigler, Timothy W.

Denver Project Office

Noll, William L.
O'Brien, W. Jack
Silverman, Mark N.

Inhalation Toxicology Research Institute

Hanson, Ray L.

Laramie Energy Technology Center

Brandenburg, Charles F.
Dana, Peter
Decora, Andrew W.
Docktor, Leroy
Farrier, David G.

Haines, William E.
Harak, Arnold
Harrington, Larry W.
Johnson, Donald R.
Lawlor, Dale L.

Little, William E.
Long, Jr., Andrew
Martel, Richard
Merriam, Norm
Poulson, Richard E.

Raymond, Jack D.
Smith, John Ward
Sudduth, Bruce C.
Virgona, Joseph E.
Weber, James

Youngberg, Alv Dan

Lawrence Berkeley Laboratory

Branstetter, Barbara
Fish, Richard H.
Fox, Phyllis
Girvin, Donald
Hodgson, Alfred T.
Jackson, Daniel
Kland, Mathilde J.
Persoff, Peter
Russell, Peter Paul

Lawrence Livermore Laboratory

Ackerman, F. Jay
Anspaugh, Lynn R.
Braun, Robert L.
Burnham, Alan K.
Campbell, John H.

Carley, James F.
Christiansen, David E.
Daniels, Jeffrey I.
Galloway, Terry R.
Hatch, Frederick T.

Ireland, Robert R.
Lamson, Kenneth C.
Lewis, Arthur E.
Mallon, Richard G.
Ondov, John M.

Ragaini, Richard C.
Raley, John H.
Rothman, Albert J.
Sandholtz, Willis A.
Sisemore, Clyde J.

Stuermer, Daniel H.
Tewes, Howard A.
Timourian, Hector
Tompkins, Michael A.
Ward, Raymond L.

Los Alamos Scientific Laboratory

Ettinger, Harry J.
Holland, Laurence Martin
Mangeng, Carolyn A.
Rudnick, Jon
Spall, W. Dale

Tillery, Marvin
Voelz, M.D., George L.
Wagner, Paul
Wanek, Patsy Lee
Wewerka, Eugene Michael

Williams, Joel M.

Naval Petroleum & Oil Shale Reserves

Goode, Bill

Oak Ridge National Laboratory

Clark, Bruce R.
Epler, James L.
Gehrers, Carl
Griest, Wayne H.
Guerin, Michael R.

Ho, C. -h.
Holland, J. Mike
Rao, T. K.
Rubin, Ira B.
Witschi, Hanspeter

Yeatts, Jr., LeRoy B.

Pacific Northwest Laboratories

Fruchter, Jonathan
Hessel, Darryl L.
Pelroy, Richard
Perkins, Richard
Wildung, Raymond E.

Wilkerson, Connie Lewis
Zachara, John M.

Sandia Laboratories

Butcher, Barry M.
Costin, Laurence S.
Grady, Dennis E.
Holcomb, David J.
Neel, Robert R.

Olsson, William A.
Parrish, R. Leon
Stevens, Aldred L. (Al)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Jaten, Charles E.
Miller, Betty

U.S. DEPARTMENT OF INTERIOR

Washington, DC

Curlin, James W.

Bureau of Mines

Bloomfield, Roger A.
Seibel, Richard

Field Components

Ash, Henry O.
David, Elanor L.
Madsen, Lowell L.

Bureau of Indian Affairs

Collier, L. W. (Bill)
Springwater, Ray

Bureau of Land Management

Andrus, Dale R.
Bessinger, Glen
Curnutt, Rocky
Graff, Greg J.
Kathman, David

Long, George
Mann, John H.
McBrumen, Roy
Mecham, Priscilla
Moorhead, Richard J.

Moss, Dean
Noll, Frank
Pearson, Marvin
Roberts, Cecil M.
Smith, Curtis

Wagner, William W.
Walter, David J.

Bureau of Mines

Demou, Sam
Hawkins, James E.
Horino, Frank G.
Kealy, Dan
Nicholson, David E.

Schottler, George R.
Stewart, Bill M.
Utter, Stephen

National Park Service

Lewis, Jr., Cecil D.

U.S. Fish and Wildlife Service

Armour, Carl L.
Bocker, Harold M.
Coulombe, Harry N.
Dietz, Donald R.
Dittberner, Phillip L.

Ischinger, Lee S.
VanDerwalker, John G.

U.S. Geological Survey

Breger, Irving A.
Davis, George H.
Malde, Harold E.
Peck, Dallas L.

U.S. Geological Survey
Area Oil Shale Office

Barker, Lawrence K.
Brady, Ray A.
Hager, James W.
Hoffman, Eric G.
Joy, Charles E.

LaHue, Miles D.
Miller, Glen A.
Oberwager, David
Rutledge, Peter A.
Sandell, Edward T.

Tucker, Roger A.

U.S. Geological Survey
Conservation Division

Kash, Don E.

U.S. Geological Survey
Geologic Division

- Cashion, William
- Dean, Walter E.
- Desborough, George A.
- Donnell, John
- Dyni, John

- Hail, William
- Johnson, Ronald C.
- Keighin, William
- McNeal, James M.
- O'Sullivan, Robert

- Pitman, Janet
- Smith, Margery
- Stead, Frank

U.S. Geological Survey
Water Resources Division

- Adams, D. Briane
- Blakey, James S.
- Collins, Dannie L.
- Covay, Kenneth J.
- Dudley, Jr., William W.

- Dutcher, Lee C.
- Feder, Gerald L.
- Goddard, Kimball E.
- Holmes, Walter F.
- Kilpatrick, Frederick

- Kimball, Briant
- Leenheer, Jerry A.
- Lindskov, Kenneth L.
- Lowham, Hugh W.
- Norman, Vernon W.

- Patt, Ralph
- Robson, Stanley G.
- Saulnier, George
- Struber, Harold
- Taylor, O. James

- Tobin, Robert L.
- Tooley, John E.
- Welder, Frank A.

U.S. DEPARTMENT OF LABOR

Mine Safety & Health Administration

- Durand, Dick
- Krohlow, Faith
- Sutton, Glen

U.S. DEPARTMENT OF TRANSPORTATION

- Brewer, George F.

U.S. ENVIRONMENTAL PROTECTION AGENCY

Washington, DC

Effluent Guidelines Division

- Kirby, Ron
- Lum, John
- Telliard, William A.

Interagency Energy Environment Program

- Stemmle, James T.

Office of Enforcement

- Kozlowski, Richard G.

Office of General Counsel

- Joseph, Todd M.

Office of Pesticides and Toxic Substances

- Mazza, Carl

Office of Planning and Evaluation
Office of Planning and Management
Policy Planning Division

- Wagner, Martin

Office of Planning and Management

- Allen, Frederick W.
- Tundermann, David W.

Office of Research and Development

- Altshuler, Morris
- Golomb, Dan
- Jakobson, Kurt
- Princiotta, Frank T.
- Reznek, Steven R.

- Riegel, Kurt W.
- Rousa, Gerald
- Schwengels, Paul F.

Office of Research and Development
Office of Environmental Processes
and Effects Research

- Frietsch, III, William
- Galli, Alfred A.

Office of the Administrator
Science Advisory Board

- McCarthy, Jr., William N.

Office of Water and Waste Management
Office of Solid Waste

- Garbe, Yvonne M.
- Lindsey, Fred
- Mercer, Mark

Field Components

Ada, OK

Newport, Bob D.

Athens, GA

Baughman, George L.
Lassiter, Ray R.

Cincinnati, OH

Bates, Ed
Blaney, Benjamin L.
Cawley, William A.
Christianson, Alden G.
Dial, Clyde J.

Harris, Eugene F.
Huffman, George L.
Mills, Paul E.
Powers, Thomas J.
Stephan, David G.

Thurnau, Robert C.

Corvallis, OR

Thomas, Robert W.

Duluth, MN

Biesinger, Kenneth E.
Mueller, Leonard H.

Gulf Breeze, FL

Richards, Norman L.

Las Vegas, NV

Bateman, Richard L.
Gilmore, Donald B.
Kinney, Wesley L.
McMillion, Leslie G.
Pearson, Michael J.

Office of Air Quality Planning and Standards

Sedman, Charles B.
Walsh, Robert T.

Research Triangle Park, NC

Barnes, H. Michael
Coffin, D.V.M., David L.
Denny, Dale A.
Durham, Jack L.
Lanier, W. Steven

Tichenor, Bruce A.

Regional Staff, Region VIII

Thoem, Terry L.

U.S. GENERAL ACCOUNTING OFFICE

Bunting, John Stewart

U.S. LIBRARY OF CONGRESS

Rothberg, Paul F.

U.S. PUBLIC HEALTH SERVICE

National Institute for Occupational Safety and Health

Attfield, Mike
Costello, Joseph
Gunter, Bobby J.
Pallay, Barry
Vegella, Thomas

Wheeler, P.E., Robert W.

STATE

MOUNTAIN PLAINS FEDERAL REGIONAL COUNCIL

Lorenson, Burman

STATE OF COLORADO

Colorado Department of Health

Roberts, Charles G.
Traylor, Frank A.
Webb, Kenneth W.

Colorado Department of Health
Radiation and Hazardous Wastes Control Division

Waesche, Ken

Colorado Department of Health
Stationary Sources Programs

Bishard, P.E., A. C.

Colorado Department of Health
Water Quality Control Division

Dildine, Evan D.
Rozich, Frank J.
Shukle, Robert J.
Wallum, P.E., Arden

Colorado Energy Research Institute

Martin, Joan
Robbins, Martin D.

Colorado House of Representatives

Edmonds, Carol

Colorado River Water Conservation District

Fischer, Roland C.

Department of Local Affairs

Jordon, Charles
Schmitz, Steve
Schmuck, Philip H.

Department of Natural Resources

Barry, III, Hamlet J.
Hecox, Walter E.
Ladwig, Lewis R.
Massey, Dean R.
McDonald, Bill

Pendleton, Jim
Rold, John

Department of Natural Resources
Division of Mined Land Reclamation

Shelton, David C.

Energy Conservation Office

Cattany, Ronald W.
Holman, Roger

STATE OF OREGON

Department of Forestry

Hennessey, Joseph P.

STATE OF UTAH

Department of Health

Rickers, Alvin E.
Sudweeks, Jr., Calvin K.

Department of Natural Resources

Feight, Cleon E.
Henderson, Charles R.

Division of State Lands

Dinehart, William K.
Prince, Donald G.

Energy Office

Hunt, Verl F. ("Buz")
Millar, Rod

Geological and Mineral Survey

Ripzma, Howard R.

Legislative District 70

Garr, John M.

Water and Power Resources Service

Linke, Deborah M.

STATE OF WYOMING

Department of Economic Planning and Development

Goodier, John T.

Department of Environmental Quality

Wood, Randolph

LOCAL

CITY OF CARBONDALE, CO

Flewelling, Richard A.

CITY OF CRAIG, CO

Thompson, Jerry Leonard

CITY OF DENVER, CO

Denver Public Library

Collins, Kay

CITY OF FRUITA, CO

Downer, Wallace G.

CITY OF GLENWOOD SPRINGS, CO

Smith, Marian I.

CITY OF GRAND VALLEY, CO

McDaniel, Floyd E.

CITY OF MEEKER, CO

Shultz, Claude E.

CITY OF NEW CASTLE, CO

Mattivi, Pete

CITY OF RANGELY, CO

Lollar, Cecil E.

CITY OF RIFLE, CO

Deppe, Daniel W.
Merkel, Lee D.
Mitchell, George E.

CITY OF SILT, CO

Brand, Annette A.

COLORADO WEST AREA COUNCIL ON GOVERNMENTS

Demos, Bob
Johnson, John W.
Kring, R. Lynn

COUNCIL OF ENERGY RESOURCE TRIBES

Office of Environmental Analysis

Siek, Robert D.

GARFIELD COUNTY, CO

Baldwin, Ray

MESA COUNTY, CO

Albers, Maxine

RIO BLANCO COUNTY, CO

Schultz, Timothy W.

UINTA BASIN ASSOCIATION OF GOVERNMENTS

George, Robert D.
Heitman, Ronald L.
Murray, Thomas M.

UNIVERSITY

COLORADO COLLEGE

Veers, Val R.

COLORADO SCHOOL OF MINES

Dickson, Philip F.
Gary, James H.
Haun, John D.
Hendricks, Lloyd J.
Hines, Tony

Hustrulid, William A.
Klusman, Ronald W.
Morse, Jerome G.
Wildeman, Thomas R.
Yesavage, Victor F.

COLORADO STATE UNIVERSITY

Berg, W. A.
Butler, Jackie D.
Cook, Wayne
Echols, James
Gray, S. Lee

Hyde, Robert
McWhorter, David B.
Melvin, Jr., Walter W.
Natusch, David S.
Redente, Edward

Taylor, David R.
Weaver, Glen D.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Probstein, Ronald F.

UNIVERSITY OF COLORADO

Bock, Jane H.
Chang, Nien-Yin
Chappell, Willard R.
Linhart, Yan
Runnells, Donald D.

Sievers, Robert

University of Colorado at Denver
Center for Environmental Sciences

Meglen, Robert R.
Nieuwenhuis, Carol A.
Peterson, Kathy
Tedeschi, Terry L.

UNIVERSITY OF DENVER

Cortese, Charles

Denver Research Institute

Bleistein, Sandra
Cornish, Rodney H.
Culbertson, William J.
Gala, Kishor
Gale, Charles

Gilmore, John S.
Gregory, William P.
Habenicht, Charles H.
Jovanovich, Andy
King, Jeannette W.

Nevens, Thomas
Prien, Isabell
Schmidt-Collerus, Josef J.
Shaffron, Michael
Snyer, William H.

Stevens, Pamela
Taylor, Graham C.
Treese, Christopher
Wallace, John R.
Williams, Ralph E.

UNIVERSITY OF OKLAHOMA

Devine, Michael

UNIVERSITY OF UTAH

de Nevers, Noel
Hill, George Richard
Jacobs, Harold R.
Sohn, Hong Y.

UNIVERSITY OF WASHINGTON

Leopold, Estella B.
Slinn, W. George N.

UNIVERSITY OF WYOMING

Ahern, John J.
Asplund, R. Owen
Bergman, Harold L.
Brookshire, David S.
Chong, Kenneth

Howatson, John
Hurtubise, Robert J.
Noble, Richard D.
Phillips, T. Terrence
Skinner, Quinton

UTAH STATE UNIVERSITY

McKell, Cyrus

WASHINGTON STATE UNIVERSITY

Whittlesey, Norman K.

WAYNE STATE UNIVERSITY

Crowl, Daniel A.

WEBER STATE COLLEGE

Davis, Alten B.

WEST VIRGINIA UNIVERSITY
  Katell, Sidney

YALE UNIVERSITY
  Sparling, Edward W.

COMMITTEE INDEX

U.S. CONGRESS

OTA Oil Shale Advisory Committee

Gary, James H.--Chairman
Boyd, James
Brennan, C. W.
Coble, Robert L.
Fischer, Roland C.

Haun, John
Johnson, Carolyn
Katell, Sidney
Leopold, Estella B.
Redmond, John F.

Ridley, Richard D.
Smith, Raymond L.
Ten Eyck, Thomas W.
Weaver, Glen D.

U.S. DEPARTMENT OF ENERGY

DOE Environmental Coordinating Committee Management Coordination Group

Franklin, Ralph--Chairman
Blair, Joseph R.
Dionne, Jane
Goldstein, Gerald
Grua, Charles

Hartstein, Art
Lailas, Nicholas
Lillian, Daniel
Powderly, John
Rotariu, George J.

Smith, David A.

DOE Environmental Coordinating Committee OS Environmental Development Planning ECC Subcommittee

Franklin, Ralph--Chairman
Blair, Joseph R.
Dionne, Jane
Goldstein, Gerald
Grua, Charles

Hartstein, Art
Ichord, William
Lailas, Nicholas
Powderly, John
Rotariu, George J.

Smith, David A.
Thomas, Harold E.
Welty, Carl

DOE ET Oil Shale Task Force

Hartstein, Art--Chairman
Brandenburg, Charles F.
Carter, Bill
Fox, Phyllis
Lewis, Arthur E.

Little, William
Stevens, Al
Sudduth, Bruce C.

DOE Oil Shale Task Force

Chappell, Willard R.--Chairman
Catany, Ron
Farrier, David S.
Fox, Phyllis
Franklin, Ralph

Fruchter, Jon
Hecox, Walter E.
Hessel, Darryl
Holland, Martin
Pelroy, Richard

Ragaini, Richard
Robbins, Martin
Siek, Robert
Voelz, George L.
Wagner, Paul

Wildung, Ray

DOE Oil Shale Task Force Advisory Group

Chappell, Willard R.--Chairman
Coomes, R. Merril
Edmonds, Carol
Gash, Roselea
Gunter, Bobby J.

Hutchins, John
Miller, Glen A.
Moure, Rafael
Phillips, Paula
Robbins, Martin

Sass, Allen
Thoem, Terry L.
Vickery, Anne

DOE Program Management Team

Fox, Phyllis
Franklin, Ralph
Hartstein, Art
Little, William
Smith, John Ward

Sudduth, Bruce C.
Ziegler, Timothy W.

LETC In Situ Hydrology Task Force

Dana, Peter O.
Farrier, David S.
Harrington, Larry W.
Noll, William L.
Youngberg, Dan

U.S. DEPARTMENT OF INTERIOR

Oil Research Information Committee

Ash, Henry O.
Blakey, James S.
Clebsch, Al
Davis, George
Decora, Andrew W.

Donnell, John
Kash, Don E.
Nicholls, Harry
Norman, Vernon W.
Rutledge, Peter A.

Bureau of Mines
Technical Advisory Committee on Mine Shaft Drilling

Doney, Chuck
Hurt, Richard
Jurkum-Wold, Hans C.
Suttie, John
Utter, Stephen

U.S. Geological Survey
Piceance Basin Groundwater Advisory Committee

Blakey, James S.
Cloninger, James
Miller, Glen A.
Rutledge, Peter A.
Stead, Frank

Taylor, O. James
Welder, Frank A.

U.S. ENVIRONMENTAL PROTECTION AGENCY

Alternate Fuels Group

Princiotta, Frank--Co-Chairman
Tundermann, David--Co-Chairman
Allen, Frederick W.
Dial, Clyde J.
Frietsch, William

Garbe, Yvonne M.
Goodwin, Don
Gregg, Charles
Harris, Eugene F.
Huglund, Bill

Jakobson, Kurt
Janes, T. K.
Jaworski, Norb
Joseph, Todd
Kovalick, Walter

Kozlowski, Rich
Lindsey, Fred
Mazza, Carl
Meagher, John

Reznek, Steven R.
Riegel, Kurt
Telliard, Bill
Thoem, Terry L.

EPA Oil Shale Work Group

Harris, Eugene F.--Chairman
Alford, Ann
Bates, Edward
Biesinger, Kenneth
Christianson, Alden G.

Coffin, David L.
Cunningham, John
D'alessio, Gregory
Denny, Dale A.
Durham, Jack L.

Fox, Phyllis
Holland, Martin
Jefcoat, Irvin
Kinney, Wesley L.
La Hue, Miles D.

McCarthy, Jr., William N.
McMillion, Leslie G.
Mercer, Mark
Miller, Glen A.
Mills, Paul E.

Mueller, Leonard H.
Newport, Rob D.
Palekar, Lolita
Palmer, Robert
Pearson, Mike

Powers, Thomas J.
Princiotta, Frank
Richards, Norman L.
Schambra, Philip E.
Sedman, Charles

Thoem, Terry L.
Thurnau, Robert C.
Tichenor, Bruce A.

Oil Shale Working Group

Dial, Clyde J.--Co-Chairman
Jakobson, Kurt--Co-Chairman
Allen, Frederick W.
Bates, Edward
Galli, Alfred A.

Garbe, Yvonne M.
Harris, Eugene F.
Kirby, Ronald
Lum, John
Mazza, Carl

Princiotta, Frank
Reznek, Steven R.
Tundermann, David
Walsh, Robert T.

INTERAGENCY

Interior/Interagency Oil Shale Environmental Advisory Panel

Ash, Henry O.--Chairman	USDOI
Beard, Thomas	
Bocker, Harold M.	USFWS
Brewer, George F.	USDOT
Collier, L. W.	BIA
David, Elanor L.	USDOI
Davis, Grant	USDA/FS
Dinehart, William K.	UDSL
Domgaard, Neil	Uinta Cty
Galler, Sydney	USDOC
Garr, John	UT
Goodier, John T.	WDEP
Gravatt, C. C.	NBS
Hall, Craig P.	
Hartstein, Art	USDOE/FE
Henderson, Charles	Uinta Cty
Jaten, Charles E.	HUD
Kenney, Kenneth	Rio Bl Cty
Linke, Deborah	UWPRS
Lorenson, Burman	MPFRC
Madsen, Lowell L.	USDOI
Malde, Harold E.	USGS
Markey, Kevin L.	
Miller, Betty	HUD
Mosley, John	HEW
O'Brien, W. Jack	USDOE/Den
Rehborg, Dwayne	Rio Bl Cty
Rising, Lyle	BR
Roberts, Cecil M.	BLM
Sedgley, Ellis F.	USDA
Sherman, Harris	
Springwater, Ray	BIA
Thoem, Terry L.	USEPA/OEPC
Traylor, Frank	CDH
Utter, Stephen	USBM
VanDerwalker, John G.	USFWS
Watson, Clarke R.	
Wright, V. Crane	

DOA Environmental Plant Center Advisory Committee

Baker, Ed	
Boswell, Merlin	USDA/FS
Butler, Jackie D.	CSU
Claggett, Richard T.	USEPA
Cloninger, James	
Crofts, Kent	
Davis, Grant	USDA/FS
Dickson, Frank	USDA/SCS
Dietz, Donald R.	USFWS
Dittberner, Phillip L.	USFWS
Echols, James	CSU
Fosdick, G. E.	
Frentress, Forrest	
Hassell, Wendell	USDA/SCS
Hyde, Robert	CSU
Kathman, David	BLM
Lance, Jim	CDHY
Legal, Cass	
Ludlam, Leslie L.	
Madsen, Rees	
McGinnies, William	USDA
McKell, Cyrus	USU
Merino, Joe	
Montgomery, Hugh	MSHA
Noller, Gary	
Parker, Daniel O.	
Raymond, Jack D.	USDOE/LETC
Russiff, John	BLM
Seamands, Wesley	WU
Sedgley, Ellis F.	USDA
Stranathan, Sam	
Zuck, Ronald	

Federal Interagency Committee on Health and Environmental Effects of Oil Shale Technology

Brown, Richard	
Frietsch, William	USEPA/OEPER
Rhoden, Richard	NIOSH
Schambra, Philip E.	NIH/NIEHS
Schulman, Murray	

National Research Council on Oil Shale and Tar Sands

Malde, Harold E.--Chairman	USGS
Callison, Charles	
Cortese, Charles	DU
Dietz, Donald R.	USFWS
Fox, Phyllis	USDOE/LBL
Hutchins, John	
Lord, William	
Ludlam, Leslie L.	
Marchant, Leland	USDOE

Paraho Oil Shale Data Evaluation Group

Goldstein, Gerald--Chairman	USDOE/EV
Fox, Phyllis	USDOE/LBL
Herstand, Bob	
Lailas, Nicholas	USDOE/RA
McCarthy, Jr., William N.	USEPA/SAB
Powers, Thomas J.	USEPA/Ci
Thoem, Terry L.	USEPA/VIII
Thurnau, Robert C.	USEPA/Ci

Paraho Air Quality Panel

La Hue, Miles D.	USGS/AOSO
Poulson, Richard E.	USDOE/LETC
Thoem, Terry L.	USEPA/VIII
Thurnau, Robert C.	USEPA/Ci
Tillery, Marvin	USDOE/LASL
Tucker, Roger A.	USGS/AOSO

Paraho Water Quality Panel

Fox, Phyllis	USDOE/LBL
McMillion, Leslie G.	USEPA/LV
Miller, Glen A.	USGS/AOSO
Newport, Rob D.	USEPA/Ada
Poulson, Richard E.	USDOE/LETC
Powers, Thomas J.	USEPA/Ci
Wewerka, Eugene Michael	USDOE/LASL

Paraho Process Characterization Panel

Fruchter, Jon	USDOE/PNL
Poulson, Richard E.	USDOE/LETC
Spall, W. Dale	USDOE/LASL

Paraho Ecology Panel

Biesinger, Kenneth	USEPA/Dul
Redente, Edward	CSU
Richards, Norman L.	USEPA/GB

Paraho Land Disturbance Panel

Harris, Eugene F.	USEPA/Ci
Meglen, Robert R.	CU
Utter, Stephen	USBM
Wildung, Ray	USDOE/PNL

Paraho Health Effects Panel

Coffin, David L.	USEPA/RTP
Disbennett, David	
Epler, Jim	USDOE/ORNL
Holland, Martin	USDOE/LASL
Holland, Mike	USDOE/ORNL

Paraho End Use Panel

Blair, Joseph R.	USDOE/EV
Epler, Jim	USDOE/ORNL
Holland, Mike	USDOE/ORNL
Smith, David A.	USDOE/EV
Witschi, Peter	USDOE/ORNL

Paraho Occupational Health & Safety Panel

Conaway, C. C.	
Ettinger, Harry	USDOE/LASL
Rudnick, John	USDOE/LASL
Stallard, Clint	
Weaver, Neill	

Oil Shale Subcommittee of Materials and Supply Committee: Committee on National Alternative Energy Supply

Dew, John	
Donnell, John	USGS/GD
Gary, James H.	CSM
Hopkins, John	
McClements, Robert	
Schwendinger, Richard	

LOCAL

Garfield County Core Group

Baldwin, Ray--Chairman	Grfld Cty
Cerise, Flaven	CWACG
Deppe, Dan	Rifle
Flewelling, Richard A.	Carbondale
Merkel, Lee D.	Rifle
Smith, Marian I.	Glwd Spgs
Velasquez, Larry	Grfld Cty

Garfield County Core Group
Carbondale Area Impact Committee

Carbondale Fire Protection District
Carbondale Sanitation District
City of Carbondale
Garfield County
REA-1 School District

Garfield County Core Group
West Garfield County Impact Advisory Committee

Carpenter, Joe R.--Chairman	Rifle
Brand, Annette A.	Silt
Fuller, Frank	CMC
Jolley, Dick	Grfld Cty
Mattivi, Peter	New Castle
McDaniel, Floyd	Grd Vly
Mitchell, George E.	Rifle

Mesa County Energy Impact Team

Wahlberg, Carl--Chairman	Mesa C
Acre, Leland	
Copeland, Tom	Palisade
Courtney, Dave	
Downer, Wally	Fruita
Elam, Harold	
Enstrom, Rick	Mesa Cty
Gormley, Pat	
Hawkins, Danny	
Hollingsworth, Dale	

Robinson, Dan	
Wright, Helen	Mesa Cty

Moffat County Energy Impact Team

LeFevre, Tom--Co-Chairman	Moffatt Cty
Thompson, Jerry--Co-Chairman	Craig
Batt, Ron	
Benrott, Jerry	Craig
Campbell, Jerri	Moffat Cty
Cooper, Don	Craig
Hartzler, Harvey	
Holmgren, Chuck	
Nall, Gary	Moffat Cty
Pankonin, Jim	Moffat Cty
Shefstead, Holmes	
Sims, Dennis	Dinosaur
Sorenson, Russ	Moffat Cty
Taygara, Saed	Craig
Trevenen, Claudia	Maybell
Wilson, Beverly	

Rio Blanco County Impact Mitigation Task Force
Rio Blanco County Core Group

Shultz, Tim--Chairman	Rio Bl Cty
Demos, Bob	CWACG
Lollar, Cecil	Rangely
Lorenson, Burman	MPFRC
Shmitz, Steve	
Shultz, Claude	Meeker

Rio Blanco County Impact Mitigation Task Force
Eastern Advisory Group

Cook, Elmo--Chairman	
Aex, Paul	Meeker
Hughes, Connie	Rio Bl Cty
King, Robert	Meeker
Kubin, Laurel	Rio Bl Cty
Mann, John	BLM
McDaniel, Russ	
Milner, Wendy	
Shelton, Judy	
Short, Geraldine	Meeker
Young, Robert	Meeker

Rio Blanco County Impact Mitigation Task Force
Western Advisory Group

Sherwin, Hoyt--Chairman	
Beard, Bill	Rangely
Bordson, Mark	CO
Kelly, Wayne	Rangely

LOCATION INDEX

CALIFORNIA

Berkeley:

USDOE/LBL	Branstetter, Barbara
USDOE/LBL	Fish, Richard H.
USDOE/LBL	Fox, Phyllis
USDOE/LBL	Girvin, Donald
USDOE/LBL	Hodgson, Alfred T.
USDOE/LBL	Jackson, Daniel
USDOE/LBL	Kland, Mathilde J.
USDOE/LBL	Persoff, Peter
USDOE/LBL	Russell, Peter Paul

Livermore:

USDOE/LLL	Ackerman, F. Jay
USDOE/LLL	Anspaugh, Lynn R.
USDOE/LLL	Braun, Robert L.
USDOE/LLL	Burnham, Alan K.
USDOE/LLL	Campbell, John H.
USDOE/LLL	Carley, James F.
USDOE/LLL	Christiansen, David E.
USDOE/LLL	Daniels, Jeffrey I.
USDOE/LLL	Galloway, Terry R.
USDOE/LLL	Hatch, Frederick T.
USDOE/LLL	Ireland, Robert R.
USDOE/LLL	Lamson, Kenneth C.
USDOE/LLL	Lewis, Arthur E.
USDOE/LLL	Mallon, Richard G.
USDOE/LLL	Ondov, John M.
USDOE/LLL	Ragaini, Richard C.
USDOE/LLL	Raley, John H.
USDOE/LLL	Rothman, Albert J.
USDOE/LLL	Sandholtz, Willis A.
USDOE/LLL	Sisemore, Clyde J.
USDOE/LLL	Stuermer, Daniel H.
USDOE/LLL	Tewes, Howard A.
USDOE/LLL	Timourian, Hector
USDOE/LLL	Tompkins, Michael A.
USDOE/LLL	Ward, Raymond L.

COLORADO

Boulder:

CU	Bock, Jane H.
CU	Chappell, Willard R.
CU	Linhart, Yan
CU	Runnells, Donald D.
CU	Sievers, Robert

Carbondale:

Carbondale	Flewelling, Richard A.

Colorado Springs:

CC	Veers, Val R.

Craig:

BLM	Moorhead, Richard J.
BLM	Noll, Frank
BLM	Pearson, Marvin
Craig	Thompson, Jerry Leonard
BLM	Walter, David J.

Denver:

BLM	Andrus, Dale R.
USDOI	Ash, Henry O.
CDNR	Barry, III, Hamlet J.
CDH/SSP	Bishard, P.E., A. C.
USGS/WRD	Blakey, James S.
DU/DRI	Bleistein, Sandra
USFWS	Bocker, Harold M.
USDOT	Brewer, George F.
GAO	Bunting, John Stewart
USGS/GD	Cashion, William
CEC	Cattany, Ronald W.
CU	Chang, Nien-Yin
DPL	Collins, Kay
DU/DRI	Cornish, Rodney H.
DU	Cortese, Charles
DU/DRI	Culbertson, William J.
USDOI	David, Elanor L.
USGS/GD	Dean, Walter E.
USGS/GD	Desborough, George A.
CDH/WQCD	Dildine, Evan D.
USGS/GD	Donnell, John
MSHA	Durand, Dick
USGS/WRD	Dutcher, Lee C.
USGS/GD	Dyni, John
USGS/WRD	Feder, Gerald L.
DU/DRI	Gala, Kishor
DU/DRI	Gale, Charles
DU/DRI	Gilmore, John S.
BLM	Graff, Greg J.
DU/DRI	Gregory, William P.
NIOSH	Gunter, Bobby J.
DU/DRI	Habenicht, Charles H.
USGS/GD	Hail, William
USDA/SCS	Hassell, Wendell
USBM	Hawkins, James E.
CDNR	Hecox, Walter E.
CEC	Holman, Roger
USBM	Horino, Frank G.
HUD	Jaten, Charles E.
USGS/GD	Johnson, Ronald C.

CDLA	Jordon, Charles
DU/DRI	Jovanovich, Andy
BLM	Kathman, David
USGS/GD	Keighin, William
DU/DRI	King, Jeannette W.
MSHA	Krohlow, Faith
CDNR	Ladwig, Lewis R.
USGS/WRD	Leenheer, Jerry A.
NPS	Lewis, Jr., Cecil D.
MPFRC	Lorenson, Burman
USDOI	Madsen, Lowell L.
USGS	Malde, Harold E.
CDNR	Massey, Dean R.
BLM	McBrumen, Roy
CDNR	McDonald, Bill
USGS/GD	McNeal, James M.
CU/CES	Meglen, Robert R.
HUD	Miller, Betty
DU/DRI	Nevens, Thomas
CU/CES	Nieuwenhuis, Carol A.
USGS/GD	O'Sullivan, Robert
CDNR	Pendleton, Jim
CU/CES	Peterson, Kathy
USGS/GD	Pitman, Janet
DU/DRI	Prien, Isabell
BLM	Roberts, Cecil M.
CDH	Roberts, Charles G.
USGS/WRD	Robson, Stanley G.
CDNR	Rold, John
CDH/WQCD	Rozich, Frank J.
DU/DRI	Schmidt-Collerus, Josef J.
CDLA	Schmitz, Steve
CDLA	Schmuck, Philip H.
USBM	Schottler, George R.
DU/DRI	Shaffron, Michael
CDMLR	Shelton, David C.
CDH/WQCD	Shukle, Robert J.
USGS/GD	Smith, Margery
DU/DRI	Snyer, William H.
USGS/GD	Stead, Frank
DU/DRI	Stevens, Pamela
USGS/WRD	Struber, Harold
MSHA	Sutton, Glen
DU/DRI	Taylor, Graham C.
USGS/WRD	Taylor, O. James
CU/CES	Tedeschi, Terry L.
USEPA/VIII	Thoem, Terry L.
CDH	Traylor, Frank A.
DU/DRI	Treese, Christopher
USBM	Utter, Stephen
CDH/RHWCD	Waesche, Ken
DU/DRI	Wallace, John R.
CDH/WQCD	Wallum, P.E., Arden
CDH	Webb, Kenneth W.
DU/DRI	Williams, Ralph E.

Englewood:	
CERT	Siek, Robert D.
Fort Collins:	
USFWS	Armour, Carl L.
CSU	Berg, W. A.
CSU	Butler, Jackie D.
CSU	Cook, Wayne
USFWS	Coulombe, Harry N.
USFWS	Dittberner, Phillip L.
CSU	Echols, James
USDA/FS	Fox, Douglas G.
CSU	Gray, S. Lee
CSU	Hyde, Robert
USFWS	Ischinger, Lee S.
USDA	McGinnies, William J.
CSU	McWhorter, David B.
CSU	Melvin, Jr., Walter W.
CSU	Natusch, David S.
CSU	Redente, Edward
CSU	Taylor, David R.
USFWS	VanDerwalker, John G.
CSU	Weaver, Glen D.
Fruita:	
Fruita	Downer, Wallace G.
Glenwood Springs:	
Grfld Cty	Baldwin, Ray
CRWC	Fischer, Roland C.
Glwd Spgs	Smith, Marian I.
Golden:	
CSM	Dickson, Philip F.
CSM	Gary, James H.
CSM	Haun, John D.
CSM	Hendricks, Lloyd J.
CSM	Hines, Tony
CSM	Hustrulid, William A.
CSM	Klusman, Ronald W.
CERI	Martin, Joan
CSM	Morse, Jerome G.
CERI	Robbins, Martin D.
CSM	Wildeman, Thomas R.
CSM	Yesavage, Victor F.
Grand Junction:	
USGS/WRD	Adams, D. Briane
Mesa Cty	Albers, Maxine
USGS/AOSO	Barker, Lawrence K.
USGS/AOSO	Brady, Ray A.
USGS/WRD	Collins, Dannie L.
USFWS	Dietz, Donald R.
CHR	Edmonds, Carol
USGS/WRD	Goddard, Kimball E.
USGS/AOSO	Hager, James W.
USGS/AOSO	Hoffman, Eric G.

USGS/AOSO	Joy, Charles E.
USGS/AOSO	LaHue, Miles D.
USGS/AOSO	Miller, Glen A.
USGS/AOSO	Oberwager, David
USGS/WRD	Patt, Ralph
USGS/AOSO	Rutledge, Peter A.
USGS/AOSO	Sandell, Edward T.
USGS/AOSO	Tucker, Roger A.
USDOE/LETC	Virgona, Joseph E.

Grand Valley:

Grd Vly	McDaniel, Floyd E.

Lakewood:

USDOE/Den	Council, Clarence
USDOE/Den	Garrett, Pauline (Polly)
USDOE/Den	McFarlane, Samuel B.
USDOE/Den	Noll, William L.
USDOE/Den	O'Brien, W. Jack
USDOE/Den	Silverman, Mark N.

Meeker:

USGS/WRD	Covay, Kenneth J.
BLM	Curnutt, Rocky
BLM	Long, George
BLM	Mann, John H.
BLM	Mecham, Priscilla
USDA/FS	Miller, Wendy L.
BLM	Moss, Dean
USGS/WRD	Norman, Vernon W.
Rio Blanco	Rehborg, Duane L.
Meeker	Shultz, Claude E.
BLM	Smith, Curtis
USGS/WRD	Tobin, Robert L.
USGS/WRD	Welder, Frank A.

New Castle:

New Castle	Mattivi, Pete

Rangely:

Rangely	Lollar, Cecil E.

Rifle:

CWACG	Demos, Bob
Rifle	Deppe, Daniel W.
CWACG	Johnson, John W.
CWACG	Kring, R. Lynn
Rifle	Merkel, Lee D.
Rifle	Mitchell, George E.
Rio Bl Cty	Schultz, Timothy W.

Silt:

Silt	Brand, Annette A.

CONNECTICUT

New Haven:

Yale	Sparling, Edward W.

DISTRICT OF COLUMBIA METROPOLITAN AREA

USEPA/OPM	Allen, Frederick W.
USEPA/ORD	Altshuler, Morris
USDA	Barse, Joseph R.
USDOE/EV	Blair, M.D., Joseph R.
USBM	Bloomfield, Roger A.
USDOE/EV	Bradley, Richard A.
NBS	Chester, Stephen
USDOI	Curlin, James W.
USDOE/RA	Davis, Ruth M.
OTA	Davis, William E.
USDOE/PE	Dionne, Jane
USDOE/EV	Franklin, Ralph
USEPA/OEPER	Frietsch, III, William
USDOE/RA	Gale, Barry G.
USEPA/OEPER	Galli, Alfred A.
USEPA/OSW	Garbe, Yvonne M.
USDOE/EV	Goldberg, Arnold J.
USDOE/EV	Goldstein, Gerald
USEPA/ORD	Golomb, Dan
USDOE/Navy	Goode, Bill
USDOE/EV	Gottlieb, Myron
NBS	Gravatt, C. C.
USDOE/EV	Grua, Charles
USDOE/RA	Halow, Mary
USDOE/RA	Harney, Brian M.
USDOE/FE	Hartstein, Art
NBS	Hertz, Harry S.
USDOE/EV	House, Peter
USDOE/EV	Ichord, William
USEPA/ORD	Jakobson, Kurt
USEPA/OGC	Joseph, Todd M.
USEPA/EGD	Kirby, Ron
USEPA/OE	Kozlowski, Richard G.
USDOE/EV	Krug, Eugene P.
USDOE/RA	Lailas, Nicholas
USDOE/RA	Langenkamp, R. Dobie
USDOE/EV	Lillian, Daniel
USEPA/OSW	Lindsey, Fred
USDOE/RA	Lukens, Larry A.
USEPA/EGD	Lum, John
USEPA/OPTS	Mazza, Carl
USEPA/SAB	McCarthy, Jr., William N.
NBS	McClendon, Lottie T.
USEPA/OSW	Mercer, Mark
USDOE/EV	Monti, Dario
USDOE/EV	Mott, William E.
USDOE/RA	Nelson, Robert H.
USDA/FS	Paulson, Neil R.
USDOE/RA	Petzrick, Paul A.
OTA	Poulton, Patricia Lynne
USEPA/ORD	Princiotta, Frank T.
USDOE/FE	Ramsey, Jerry W.
USEPA/ORD	Reznek, Steven R.
USEPA/ORD	Riegel, Kurt W.
OTA	Robinson, Phillip L.

USDOE/EV	Rotariu, George J.
LOC	Rothberg, Paul F.
USEPA/ORD	Rousa, Gerald
USEPA/ORD	Schwengels, Paul F.
CEQ	Scroggin, Don G.
USBM	Seibel, Richard
USDOE/RA	Sheerin, John C.
USDOE/EV	Shull, Roger D.
OTA	Sladek, Thomas A.
USDOE/EV	Smith, David A.
USEPA/IEEP	Stemmle, James T.
USEPA/EGD	Telliard, William A.
USDOE/FE	Thomas, Harold E.
USEPA/OPM	Tundermann, David W.
USEPA/PPD	Wagner, Martin
USDOE/FE	Watkins, J. Wade
USDOE/EV	Welty, Carl
USDOE/FE	Wieber, Paul R.
USDOE/EV	Williams, Ted
NBS	Zielinski, Jr., Walter L.
USDOE/RA	Zukor, Stephen H.

FLORIDA

Gulf Breeze:

USEPA/GB	Richards, Norman L.

GEORGIA

Athens:

USEPA/Ath	Baughman, George L.
USEPA/Ath	Lassiter, Ray R.

ILLINOIS

Argonne:

USDOE/Arg	Santini, Danilo
USDOE/Arg	Surles, Terry
USDOE/Arg	Torpy, Michael F.

Carbondale:

USDOE/Car	Caudle, Rodney
USDOE/Car	Hayduk, Charles
USDOE/Car	Zeigler, Timothy W.

MASSACHUSETTS

Cambridge:

MIT	Probstein, Ronald F.

MICHIGAN

Detroit:

Wayne St.	Crowl, Daniel A.

MINNESOTA

Duluth:

USEPA/Dul	Biesinger, Kenneth E.
USEPA/Dul	Mueller, Leonard H.

Twin Cities:

USBM	Demou, Sam

MONTANA

Billings:

USDA/FS	Davis, Grant

NEVADA

Las Vegas:

USEPA/LV	Bateman, Richard L.
USEPA/LV	Gilmore, Donald B.
USEPA/LV	Kinney, Wesley L.
USEPA/LV	McMillion, Leslie G.
USEPA/LV	Pearson, Michael J.

NEW MEXICO

Albuquerque:

USDOE/SL	Butcher, Barry M.
USDOE/SL	Costin, Laurence S.
USDOE/SL	Grady, Dennis E.
USDOE/ITRI	Hanson, Ray L.
USDOE/SL	Holcomb, David J.
USDOE/SL	Neel, Robert R.
USDOE/SL	Olsson, William A.
USDOE/SL	Parrish, R. Leon
USDOE/SL	Stevens, Aldred L. (Al)

Los Alamos:

USDOE/LASL	Ettinger, Harry J.
USDOE/LASL	Holland, Laurence Martin
USDOE/LASL	Mangeng, Carolyn A.
USDOE/LASL	Rudnick, Jon
USDOE/LASL	Spall, W. Dale
USDOE/LASL	Tillery, Marvin
USDOE/LASL	Voelz, M.D., George L.
USDOE/LASL	Wagner, Paul
USDOE/LASL	Wanek, Patsy Lee
USDOE/LASL	Wewerka, Eugene Michael
USDOE/LASL	Williams, Joel M.

NORTH CAROLINA

Research Triangle Park:

USEPA/RTP	Barnes, H. Michael
USEPA/RTP	Coffin, V.M.D., David L.
USEPA/RTP	Denny, Dale A.
USEPA/RTP	Durham, Jack L.
USEPA/RTP	Lanier, W. Steven
NIH/NIEHS	Piver, Warren T.
NIH/NIEHS	Schambra, Philip E.
USEPA/OAQPS	Sedman, Charles B.
USEPA/RTP	Tichenor, Bruce A.
USEPA/OAQPS	Walsh, Robert T.

OHIO

Cincinnati:

USEPA/Ci	Bates, Ed
USEPA/Ci	Blaney, Benjamin L.
USEPA/Ci	Cawley, William A.
USEPA/Ci	Christianson, Alden G.
USEPA/Ci	Dial, Clyde J.

USEPA/Ci	Harris, Eugene F.
USEPA/Ci	Huffman, George L.
USEPA/Ci	Mills, Paul E.
USEPA/Ci	Powers, Thomas J.
USEPA/Ci	Stephan, David G.
USEPA/Ci	Thurnau, Robert C.

OKLAHOMA

Ada:

USEPA/Ada	Newport, Bob D.

Norman:

OU	Devine, Michael

OREGON

Corvallis:

USEPA/Corv	Thomas, Robert W.

Salem:

ODF	Hennessey, Jr., Joseph P.

TENNESSEE

Oak Ridge:

USDOE/ORNL	Clark, Bruce R.
USDOE/ORNL	Epler, James L.
USDOE/ORNL	Gehrers, Carl
USDOE/ORNL	Griest, Wayne H.
USDOE/ORNL	Guerin, Michael R.
USDOE/ORNL	Ho, C. -h.
USDOE/ORNL	Holland, J. Mike
USDOE/ORNL	Rao, T. K.
USDOE/ORNL	Rubin, Ira B.
USDOE/ORNL	Witschi, Hanspeter
USDOE/ORNL	Yeatts, Jr., LeRoy B.

UTAH

Fort Duchesne:

BIA	Collier, L. W. (Bill)
BIA	Springwater, Ray

Logan:

USU	McKell, Cyrus
USDA/FS	Packer, Paul E.

Ogden:

Weber St.	Davis, Alten B.

Price:

USL	Garr, John M.

Provo:

USDA/FS	Ferguson, Robert B.
USDA/FS	Frischknecht, Neil C.

Roosevelt:

UBAG	George, Robert D.
UBAG	Heitman, Ronald L.

Salt Lake City:

USDA/FS	Boswell, Merlin N.
UU	de Nevers, Noel
UDSL	Dinehart, William K.
UDNR	Feight, Cleon E.
UU	Hill, George Richard
USGS/WRD	Holmes, Walter F.
UEO	Hunt, Verl F. ("Buz")
UU	Jacobs, Harold R.
USGS/WRD	Kimball, Briant
USGS/WRD	Lindskov, Kenneth L.
UWPRS	Linke, Deborah M.
UEO	Millar, Rod
UDSL	Prince, Donald G.
UDH	Rickers, Alvin E.
UGMS	Ripzma, Howard R.
UU	Sohn, Hong Y.
UDH	Sudweeks, Calvin K.
USGS/WRD	Tooley, John E.
BLM	Wagner, William W.

Vernal:

UDNR	Henderson, Charles R.
UBAG	Murray, Thomas M.

VIRGINIA

Reston:

USGS	Breger, Irving A.
USGS	Davis, George H.
USGS/CD	Kash, Don E.
USGS/WRD	Kilpatrick, Frederick
USGS	Peck, Dallas L.

WASHINGTON

Pullman:

WSU	Whittlesey, Norman K.

Richland:

USDOE/PNL	Fruchter, Jonathan
USDOE/PNL	Hessel, Darryl L.
USDOE/PNL	Pelroy, Richard
USDOE/PNL	Perkins, Richard
UW	Slinn, W. George N.
USDOE/PNL	Wildung, Raymond E.
USDOE/PNL	Wilkerson, Connie Lewis
USDOE/PNL	Zachara, John M.

Seattle:

UW	Leopold, Estella B.

Spokane:

USBM	Kealy, Dan
USBM	Nicholson, David E.
USBM	Stewart, Bill M.

WEST VIRGINIA

Morgantown:

NIOSH	Attfield, Mike
NIOSH	Costello, Joseph
WVU	Katell, Sidney
NIOSH	Pallay, Barry
NIOSH	Vegella, Thomas
NIOSH	Wheeler, P.E., Robert W.

WISCONSIN

Madison:

USGS/WRD	Saulnier, George

WYOMING

Casper:

BLM	Bessinger, Glen
USDA/SCS	Dickson, Frank

Cheyenne:

USGS/WRD	Dudley, Jr., William W.
WDEP	Goodier, John T.
USGS/WRD	Lowham, Hugh W.
WDEQ	Wood, Randolph

Laramie:

WU	Ahern, John J.
WU	Asplund, R. Owen
WU	Bergman, Harold L.
USDOE/LETC	Brandenburg, Charles F.
WU	Brookshire, David S.
WU	Chong, Kenneth
USDOE/LETC	Dana, Peter
USDOE/LETC	Decora, Andrew W.
USDOE/LETC	Docktor, Leroy
USDOE/LETC	Farrier, David G.
USDOE/LETC	Haines, William E.
USDOE/LETC	Harak, Arnold
USDOE/LETC	Harrington, Larry W.
WU	Howatson, John
WU	Hurtubise, Robert J.
USDOE/LETC	Johnson, Donald R.
USDOE/LETC	Lawlor, Dale L.
USDOE/LETC	Little, William E.
USDOE/LETC	Long, Jr., Andrew
USDOE/LETC	Martel, Richard
USDOE/LETC	Merriam, Norm
WU	Noble, Richard D.
WU	Phillips, T. Terrence
USDOE/LETC	Poulson, Richard E.
USDOE/LETC	Raymond, Jack D.
WU	Skinner, Quinton
USDOE/LETC	Smith, John Ward
USDOE/LETC	Sudduth, Bruce C.
USDOE/LETC	Weber, James
USDOE/LETC	Youngberg, Alv Dan

PUBLICATIONS DIRECTORY

ACKERMAN, F. JAY

Raley, J.; Sandholtz, W.; Ackerman, F. "Results from Simulated, Modified In Situ Retorting in Pilot Retorts". (UCRL-80544), April 1978.

Ackerman, F.; Sandholtz, W.; Raley, J.; Laswell, B. "Oil Shale Project Run Summary for Small Retort Run S-10". (UCID-17854), June 1978.

Sandholtz, W.; Ackerman, F.; Biermann, A.; Laswell, B.; Tripp, L. "Oil Shale Project Small Retort Run S-11". (UCID-17855), June 1978.

Ackerman, F.; Sandholtz, W.; Raley, J.; Biermann, A.; Laswell, B.; Tripp, L. "Oil Shale Project Small Retort Run Summary, Run S-12". (UCID-17910), August 1978.

Ackerman, F.; Sherman, N. "A Computer Code to Generate Contour Plots of Retort Temperature Data". (UCID-17849), August 1978.

Sandholtz, W.; Ackerman, F.; Rothman, A.; Miller, W.; Cope, E.; Ronchetto, J. "The Lawrence Livermore Laboratory Oil Shale Retorts". (UCRL-52551), September 1978.

Ackerman, F.; Sandholtz, W.; Raley, J.; Tripp, L.; Biermann, A. "Oil Shale Project Run Summary, Small Retort Run S-13". (UCID-18068), January 1979.

Ackerman, F.; Sandholtz, W.; Raley, J.; Mallon, R.; Carley, J.; Tripp, L. "Oil Shale Project Small Retort Run Summary, Run S-15". (UCID-18282), September 1979.

Ackerman, F.; Sandholtz, W.; Raley, J.; Tripp, L. "Oil Shale Project Run Summary, Small Retort Run S-14". (UCID-18503), December 1979.

ADAMS, D. BRIANE

Adams, D.B. "Basic Data (Hydrologic-Water Resources) of the Roan and Parachute Creek Basins", in press.

Adams, D.B. "An Interpretive Comprehensive Report on the Hydrology of Roan and Parachute Creek Basins, Colorado".

AHERN, JOHN J.

Ahern, J.J.; Armstrong, D. "Phosphorous Control in Urban Run-off by Street Sweeping", presented at the International Symposium on Urban Storm Run-off, University of Kentucky, 1979.

Ahern, J.J.; Weand, B.L. "Can We Attain Fishable/Swimable Waters?" Water and Waste Eng. 1979.

Ahern, J.J.; Miller, J.; Violette, D. "The Salty Green". Water and Waste Eng. , in press.

ANSPAUGH, LYNN R.

Ondov, J.M.; Daniels, J.I.; Lamson, K.C.; Anspaugh, L.R. "Potential Atmospheric Emissions from In Situ Oil Shale Retorting with the LLL RISE Process: A Preliminary Assessment of Commercial Control Needs Based on Off-Bas and Product Measurements on the L-3 Retort". Draft report.

ASH, HENRY O.

Ash, H.O. "Prototype Oil Shale Program and Environmental Advisory Panel Summary". March 1979.

Ash, H.O. "Annual Report of the Oil Shale Environmental Advisory Panel". 1980.

ASPLUND, R. OWEN

Lawlor, D. L.; Latham, D.; Bartke, T.C.; Asplund, R.O. "The Use of Optical Activity Measurements in Oil Shale Processing". J. Am. Chem. Soc. Div. Fuel Chem. 1978, 23(2): 1-9.

Skinner, Z. D.; Moore, T.S.; Asplund, R.O.; Sexton J.C.; Farrier, D.S. "Plant Responses to Aqueous Effluents, Derived from In-Situ Fossil Fuel Processing, No. 1, Development of Screening Methods". LET/RI-79/4, 1979.

Skinner, O.D.; Moore, T.S.; Asplund, R.O.; Sexton, J.C.; Farrier, D.S. "Phytotoxicity and Plant Response to Aqueous Effluents Derived from an In-Situ Oil Shale Process Water", presented in Proceedings of 12th Annual Oil Shale Symposium, 1979, Golden, CO, 122.

Lawlor, D.L.; Latham, D.R.; Fausett, D.W.; Asplund, R.O. "Post Burn Study of the Rock Springs Site 9 In-Situ Retorting Experiment", presented in Proceedings of 12th Annual Oil Shale Symposium, 1979, Golden, CO, 221.

BARSE, JOSEPH R.

Gray, S.L.; Sparling, E.W.; Whittlesey, N.K. "Water for Energy Development in the Northern Great Plains and Rocky Mountain Regions". Natural Resource Economics, ESCS, USDA, unpublished report, 1978, (Project Officer).

Whittlesey, N.K. "Agricultural Impacts of Oil Shale Development". unpublished working paper No. 46, Natural Resource Economics, ESCS, USDA, (Project Officer).

BERG, W. A.

Harbert, H.P.; Berg, W.A. "Vegetative Stabilization of Spent Oil Shale". EPA-600/7-78, U.S. Environmental Protection Agency, 1978.

Berg, W.A.; Herron, J.T.; Harbert, H.P.; Kiel, J.E. "Vegetative Stabilization of Union Oil Company Process B Retorted Oil Shale". Colorado State University Experiment Station Technical Bulletin 1135, Colorado State University, Ft. Collins, CO, 1979.

Berg, W.A. "Lysimeter Study on the Disposal of Paraho Retorted Oil Shale". EPA-600/7-79-188, U.S. Environmental Protection Agency, 1979.

Berg, W.A. "Vegetation and Lysimeter Studies on Decarbonized Oil Shale". Colorado State University Experiment Station Technical Bulletin, Colorado State University, Ft. Collins, CO, in press.

BERGMAN, HAROLD L.

Goetz, F.W.; Bergman, H.L. "The Effects of Steroids on Final Maturation and Ovulation of Oocytes from Brook Trout (*Salvelinus fontinalis*) and Yellow Perch (*Perca flavescens*)". *Biol. Repro.* 1978, 18, 293-298.

Goetz, F.W.; Bergman, H.L. "The In Vitro Effects of Mammalian and Piscine Gonadtropin and Pituitary Preparations on Final Maturation in Yellow Perch (*Perca flavescens*) and Walleye (*Stizostedion vitreum*)". *Can. J. Zool.* 1978, 56, 348-350.

Trabalka, J.R.; Eyman, L.D.; Frank M.L.; Bergman, H.L. "Kinetics of Intracardially Injected Plutonium-237 Citrate in Channel Catfish (*Ictalurus punctatus*)". *Health Phys.* 1978, 35, 779.

Bergman, H.L.; Carlson, R.M.; Gehrs, C.W.; Katz, M.; Landolt, M.L. *Phenol.* In "A Review of the EPA Redbook: Quality Criteria for Water". Water Quality Section. Thurston, R.V.; Russo, R.C.; Fetterolf, C.M.; Edsall T.A.; Barber, Y.M., Eds.; American Fisheries Society: Bethesda, MD, 1979.

Bergman, H.L.; DeGraeve, G.M.; Anderson A.D.; Farrier, D.S. "Effects of Complex Effluents from In Situ Fossil Fuel Processing of Aquatic Biota", presented at the Proceedings of the First Life Sciences Symposium on Potential Health and Environmental Effects of Synthetic Fossil Fuel Technologies. Oak Ridge National Laboratory, Oak Ridge, TN, July 1979, 204-211.

Anderson, A.D.; Lebsack, M.E.; DeGraeve, G.M.; Farrier, D.S.; Bergman, H.L. "Toxicity of an In Situ Oil Shale Process Water to Aquatic Biota". *Arch. Environ. Contam. and Toxicol.* 1980, in press.

DeGraeve, G.M.; Overcast, R.L.; Bergman, H.L. "Toxicity of Underground Coal Gasification Condenser Water and Selected Constituents to Aquatic Biota". *Arch. Environ. Contam. Toxicol.* 1980, in press.

DeGraeve, G.M.; Geiger, D.L.; Meyer, J.S.; Bergman, H.L. "Acute and Embryolarval Toxicity of Phenololic Compounds to Aquatic Biota". *Arch. Environ. Contam. Toxicol.* 1980, in press.

Bergman, H.L. et al. 1977 Annual progress report: "Effects of Aqueous Effluents from In Situ Fossil Fuel Processing Technologies on Aquatic Systems". Submitted to U.S. Department of Energy and U.S. Environmental Protection Agency, 1978.

Bergman, H.L. et al. 1978 Annual progress report: "Effects of Aqueous Effluents from In Situ Fossil Fuel Processing Technologies on Aquatic Systems". Submitted to U.S. Department of Energy and U.S. Environmental Protection Agency, 1979.

Marcus, M.D.; Bergman, H.L.; Stoller, D.A.; Brown, S.K.; Moholt, P.A. "Bibliography of Aquatic Ecosystem Effects, Analytical Methods and Treatment Technologies for Organic Compounds in Advanced Fossil-Fuel Processing Effluents". U.S. Environmental Protection Agency, Ecological Research Series Report, 1979, in press.

BLAKEY, JAMES F.

Leifeste, D.K.; Blakey, J.F.; Hughes, L.S. "Reconnaissance of Chemical Quality of Surface Waters of the Red River Basin, Texas". Texas Water Development Report, 1980, in press.

Blakey, J.F.; Kunze, H.L. "Reconnaissance of Chemical Quality of Surface Waters of the Coastal Basins of Texas". Texas Water Development Board Report, 1970, in press.

Blakey, J.F. "Design of an Automatic Monitoring System". Proceedings of the National Symposium on Data and Instrumentation for Water Quality Management, Madison, WI, Conference of State Sanitary Engineers, 1970, in press.

BLOOMFIELD, ROGER A.

Bloomsburg, G.L.; Bloomfield, R.A. "Seepage Through Partially Saturated Mine Waste Disposal Systems", presented at the 11th Annual Idaho Engineering Geology and Soil Engineering Symposium, Moscow, ID, 1979.

Bloomfield, R.A.; Stewart, B.M. "Design Parameters for Oil Shale Waste Disposal Systems". USBM Information Circular 1980, in press.

BOSWELL, MERLIN N.

Boswell, M.N. "Erosion Control on Mined Lands". Soil Conservation Service of Colorado.

BRADY, RAY A.

Brady, R.A. "Basic Characteristics of Oil Shale Reserves in Mineral Property Economics". *Campbell Petroleum Series*, Vol. 2, 89-139.

BRAUN, ROBERT L.

Carley, J.F.; Braun, R.L. "Ignition of In-Situ Oil Shale Retorts with Hot Inert Gas". *In Situ* 1978, 2, 271.

Sohn, H.Y.; Braun, R.L. "Simultaneous Fluid-Solid Reactions in Porous Solids: Part I, Reactions Between One Solid and Two Fluid Reactants". (Lawrence Livermore Laboratory Report UCRL-81066, May 1978) *Chem. Eng. Sci.* 1980, in press.

Braun, R.L. "Results of Computer Simulation of In Situ Oil Shale Retorting". *In Situ* 1979, 3, 173.

Carley, J.F.; Braun, R.L. "Studies of Ignition of In Situ Oil Shale Retorts with Hot Inert Gas". Lawrence Livermore Laboratory Report UCRL-82086, April 1979, and presented in Proceedings of the 14th Intersociety Energy Conversion Conference, Boston, MA, August 1979.

Chin, R.C.; Braun, R.L. "Numerical Solutions of Chemically Reacting Flows in Porous Media". (Lawrence Livermore Laboratory Report UCRL-81003, January 1979), *J. Comp. Phys.* 1980, in press.

BRANSTETTER, BARBARA

Branstetter, B.; Fox, J.P. "Trace Element Analysis on the Naval Oil Shale Reserve No. 1". July 1 to September 30, 1978, UCID-8070.

Branstetter, B.; Fox, J.P.; Lubic, S. "Trace Element Analysis of the Naval Oil Shale Reserve No. 1". October 1 to December 31, 1978, UCID-8110.

BREGER, IRVING A.

Breger, I.A. "Geochemical Considerations Regarding the Origin of Heavy Crude Oils: Suggestions for Exploration", presented at the 1st International Conference on the Future of Heavy Crudes and Oil Sands, June 1979, Edmonton, Alberta (Canada), sponsored by UNITAR. 1980, in press.

Hatcher, P.; Breger, I.A. "Structural Characteristics of Future Acids from Continental Shelf Sediments as Determined by ^{1}H and ^{13}CNMR". 1980, in press.

Breger, I.A. "A Suggested Origin for the Gas in Eastern Devonian Shales". Abstract, Third Eastern Gas Shales Symposium, Morgantown, WV, October 1979.

Breger, I.A. "Kerogen - Its Chemistry, Origin, Occurrence, and Relationship to Crude Oil", presented at the 177th Meeting of the ACS, April 1979, Honolulu, HI.

Breger, I.A. "Geochemical Considerations Regarding the Origin of Heavy Crude Oils", presented at the 178th Meeting of the ACS, September 1979, Washington, DC.

BURNHAM, ALAN K.

Campbell, J.H.; Burnham, A.K. "Oil Shale Retorting: Kinetics of the Decomposition of Carbonate Minerals and Subsequent Reaction of CO_2 with Char". 11th Oil Shale Symposium, Golden, CO, Colorado School of Mines, April 1978. Proceedings published 1978.

Slettevold, C.A.; Biermann, A.H.; Burnham, A.K. "A Surface-Area and Pore-Volume Study of Retorted Oil Shale". Lawrence Livermore Laboratory Report UCRL-52619, 1978.

Burnham A.K.; Taylor, J.R. "Shale Oil Cracking 1. Kinetics". Lawrence Livermore Laboratory Report UCID-18284, 1979.

Burnham, A.K. "Reaction Kinetics Between Steam and Oil-Shale Residual Carbon". *Fuel* 1979, 58, 719.

Burnham, A.K. "Reaction Kinetics Between CO_2 and Oil Shale Residual Carbon. 1. Effect of Heating Rate on Reactivity". *Fuel* 1979, 58, 285.

Burnham, A.K. "Reaction Kinetics Between CO_2 and Oil Shale Residual Carbon. II. Partial-Pressure and Catalytic-Mineral Effects". *Fuel* 1979, 58, 713.

Burnham, A.K.; Stubblefield, C.T.; Campbell, J.H. "Effects of Gas Environment on Mineral Reactions in Colorado Oil Shale". *Fuel* 1980, in press.

Burnham, A.K. "Studies of Oil-Shale Reaction Chemistry at LLL". (Lawrence Livermore Laboratory Report UCRL-83568, 1979), Proceedings of Institute of Gas Technology Symposium, Atlanta, GA, 1979, in press.

Burnham, A.K.; Stubblefield C.T.; Campbell, J.H. "Effects of Gas Environment on Mineral Reactions in Colorado Oil Shale". *Fuel* 1980, in press.

Campbell J.H.; Burnham, A.K. "Reaction Kinetics for Modeling Oil Shale Retorting". *In Situ* 1980, in press.

CAMPBELL, JOHN H.

Campbell, J.H. "Oil Shale Retorting: A Correlation of Selected IR Absorbance Bands with Process Heating Rates and Oil Yield". *In Situ* 1979, 3, 33.

Campbell, J.H. "Reacting Kinetics for Modeling Oil Shale Retorting". *In Situ*, in press.

Campbell, J.H. "Effects of Gas Environment on Mineral Reactions in Oil Shale". *Fuel*, in press.

Campbell, J.H. "Gas Evolution During Oil Shale Pyrolysis" *Fuel*, in press.

Campbell, J.H. "Sweep Efficiency Modeling of MIS Retorts", in press.

CARLEY, JAMES

Carley, J.; Braun, R.L. "Ignition of In-Situ Oil-Shale Retorts with Hot Inert Gas". Presented at the 1978 Combustion Institute Spring Meeting, Boulder, CO, April 1978; published in *In Situ* 1978, 2(4), 271-294.

Carley, J.; Braun, R.L. "Studies of Ignition of In Situ Oil Shale Retorts with Hot Inert Gas". Presented at the 14th Intersociety Energy Conversion Engineering Conference, Boston, MA., August 1979, published in conference proceedings.

Carley, J. "Sample Size Required for Analysis of OIl Shale of Widely Varying Grade and Particle Size". Presented at the EPA Oil Shale Sampling, Analysis and Quality Assurance Symposium, Denver, CO, March 1979, published in conference proceedings.

Carley, J. "Spontaneous Ignition in Preheated Beds of Spent Oil Shale", submitted for publication in *In Situ*.

CASHION, WILLIAM

Cashion, W. "Geologic Map of the Walsh Knolls Quadrangle". Uinta County, UT and Rio Blanco County, CO, Miscellaneous Field Study Map, MF-1013, 1978.

CHAPPELL, WILLARD R.

Chappell, W. "Toxic Trace Elements and Oil Shale Production". 11th Annual Oil Shale Symposium, Golden, CO, 1978, 32-42.

Chappell, W. "DOE Task Force on MIS Processes". 12th Annual Oil Shale Symposium, Golden, CO, 1979.

CHESTER, STEPHEN

Hertz, H.S.; Chester, S.; Wise, S.; May, W.E. "Quantitative Determination of Toxic Organic Chemicals in Shale Oil", submitted for publication in *Anal. Chem.*

CHONG, KENNETH P.

Hoyt, P.M.; Paulsen, B.Y.; Chong, K.P.; Smith, J.W. "Strain Rate Effects on the Mechanical Properties of Oil Shale", presented at Society for Experimental Stress Analysis Spring Meeting, Wichita, KS, May 1978, paper no. CR-6, 20 pp.

Chong, K.P. "A New Method for the Mechanical Testing of Brittle Materials", presented at 8th U.S. National Congress of Applied Mechanics, Los Angeles, CA, June 1978.

Chong, K.P.; Smith, J.W.; Khaliki, B. "Creep and Relaxation of Oil Shale", published in Proceedings of 19th U.S. Symposium on Rock Mechanics, Lake Tahoe, NV, May 1978, 414-421.

Chang, B.; Costello, K.; Chong, K.P.; Smith, J.W. "Fatigue Tests of Oil Shale", published in Proceedings of 19th U.S. Symposium on Rock Mechanics, Lake Tahoe, NV, May 1978, 408-413.

Chong, K.P. "Discrepancies of the Classical Theory in Split Cylinder Tests", presented at SIAM Fall Meeting, Knoxville, TN, October 1978.

Chong, K.P.; Costello, K.L.; Smith, J.W. "Three Dimensional Characterization of the Mechanical Properties of Wyoming's Tipton Member Oil Shale", presented at Second Annual Oil Shale Conversion Symposium, Grand Junction, CO, December 1978.

Chong, K.P.; Uenishi, K.; Munari, A.C.; Smith, J. W. "Physical Properties of Oil Shale from Colorado's Naval Oil Shale Reserve", presented at Second Annual Oil Shale Conversion Symposium, Grand Junction, CO, December 1978.

Chong, K.P.; Costello, K.L.; Smith, J.W. "Three Dimensional Characterization of the Mechanical Properties of Green River Formation Oil Shale of Wyoming's Tipton Member", presented at Society for Experimental Stress Analysis Spring Meeting, San Francisco, CA, May 1979, No. CR-6, pp. 20.

Chong, K.P.; Smith, J.W.; Chang, B.; Roine, S. "Oil Shale Properties by Split Cylinder Method". J. Geotech. Eng. Div. ASCE, Vol. 105, No. GT5, Proc. Paper 14567, May 1979, 595-611.

Chong, K.P.; Uenishi, K.; Munari, A.C.; Smith, J.W. "Three Dimensional Characterization of the Mechanical Properties of Colorado Oil Shale", Proceedings of the 20th U.S. Symposium on Rock Mechanics, Austin, TX, June 1979, 369-379.

Chong, K.P.; Hoyt, P.M.; Smith, J.W.; Paulsen, B.Y. "Effects of Strain Rate on Oil Shale Fracturing". Int. J. Rock Mech. Sci. Pergamon Press, 1979, 16 (6), 9.

Chong, K.P.; Uenishi, K.; Smith, J.W. "Complete Elastic Constants and Stiffness Coefficients for Oil Shale". Report of Investigations, DOE/LETC/RI-80, Department of Energy, 1980, 35 pp.

Chong, K.P.; Chen, J.L.; Uenishi, K.; Smith, J.W. "A New Method to Determine the Independent Shear Moduli of Transversely Isotropic Materials", Proceedings of the 4th International Congress on Experimental Mechanics, SESA, Boston, MA, May 1980, No. R121.

Wang, K.A.; Chong, K.P. "Diametrical Compression of Transversely Isotropic Disks", Proceedings of the 21st U.S. Symposium on Rock Mechanics, Rolla, MO, May 1980.

CLARK, BRUCE R.

Clark, B.R.; Ho, C.-h.; Guerin, M.R.; Clark, B.R.; Rao, T.K.; Epler, J.L. "Aromatic Amines and N-Heterocyclics Identified as Important Mutagens in Synthetic Crude Oils", submitted for publication in Nature.

Ho, C.-h.; Ma, C.Y.; Clark, B.R.; Guerin, M.R.; Rao, T.K.; Epler, J.L. "Separation of Neutral Nitrogen Compounds from Synthetic Crude Oils for Biological Testing", submitted for publication in Environ. Res.

Rubin, I.B.; Goeckner, N.A.; Clark, B.R. "Polar Constituents of a Shale Oil: Comparative Composition with Other Fossil-Derived Liquids", Proceedings, EPA Oil Shale Sampling, Analysis, and Quality Assurance Symposium, Denver, CO, March 1979.

Holland, J.M.; Rahn, R.O.; Smith, L.H.; Clark, B.R.; Chang, S.S.; Stephens, T.J. "Dosimetry of Coal and Shale-Derived Crude Liquids as Mouse Skin Carcinogens", Proceedings, EPA Oil Shale Sampling, Analysis and Quality Assurance Symposium, Denver, CO, March 1979. Published in J. Occup. Med. 1979, 21(9).

COFFIN, DAVID L.

Coffin, D.L. "Health Effects of Refining and Use of Shale Oil and Oil Shale". Pollution Control Guidance Document for Oil Shale Development, in press.

Coffin, D.L. "A Methodological Approach to the Evaluation of the Health Effects of Oil Shale Development", Proceedings, 4th U.S.-U.S.S.R. Joint Symposium on Comprehensive Analysis of the Environment, in press.

Coffin, D.L. "The Environmental Protection Agency/Oak Ridge Materials Repository: A Matrix Approach to the Biological Investigation of Synthetic Fuels", Proceedings, Interagency Conference, Research Triangle Park, 1979, in press.

Coffin, D.L.; Guerin, M.R.; Griest, H.W. "Interagency Program in Health Effects of Synthetic Fossil Fuels Technologies: Operation of a Material Repository", Conference Proceedings, ORNL-78093, 1979, 153-156.

COOK, C. WAYNE

Cook, C.W.; Redente, E.F. "Annual Report of Reclamation of Disturbed Oil Shale Land". Colorado State University, DOE Annual Report, 1979, in press.

Cook, C.W.; Redente, E.F.; Ruzzo, W.J. "Reclamation of Spent Oil Shale Material". Colorado State University, DOE Symposium, Washington, DC, March 1980.

Cook, C.W.; Redente, E.F.; Ruzzo, W.J. "Successional Expression of Vegetation Following Seeding of Disturbed Oil Shale Land", Symposium of Ecological Society, Colorado State University, Tucson, AZ, 1980.

Cook, C.W.; Redente, E.F., Eds. "A Reclamation Studies on Oil Shale Land in NW Colorado". Colorado State University Research Report, February 1980.

Cook, C.W.; Redente, E.F.; Berg, W.A.; Ruzzo, W.J. "Retorted Oil Shale Management", 2nd U.S. DOE Environmental Control Symposium, Washington, DC, March 1980.

CORTESE, CHARLES

Cortese, C., Ed. "Social Impacts of Energy Development in the West." Author with Jones, B. "Energy Boom Towns". Chapter in Unseld, C.T. et al. "Sociopolitical Impacts of Energy Use and Policy". National Academy of Science, Irvington Press, 1979.

Cortese, C., Ed. "Rapid Growth and Social Change in Western Communities". In Social Impact Assessment, Vol 40-41, April-May 1979.

Cortese, C.; Jones, B. "The Sociological Analysis of Boomtowns". In Davenport, J. et al. "Boomtowns and Human Services", University of Wyoming Press, 1979.

Cortese, C.; Baxter, J. "Social Impact Assessment and Community Participation: Issues in the Long Range Efforts of Energy Management in Boom Towns". In "Energy Issues in Colorado's Future", Colorado Energy Research Institute, 1980.

COSTELLO, JOSEPH

Costello, J. "Health Studies of Oil Shale Workers", 11th Oil Shale Symposium Proceedings, Colorado School of Mines, Golden, CO, 1978, 10-14.

Costello, J. "Morbidity and Mortality Study of Shale Oil Workers in the United States". Environ. Health Perspect. 1979, 30, 205-208.

Costello, J. "Retrospective Mortality Study of Oil Shale Workers, 1948-1977", presented at the 2nd Annual NIOSH Scientific Symposium, Rockville, MD, October 1979.

CROWL, DANIEL A.

Crowl, D.A.; Piccirelli, R.A. "Oil Shale Pressure Gradients for a Non-Porous Shrinking Core Model". College of Engineering Energy Center, Report 78-1105-1, January 1978.

Crowl, D.A. "Porous Solid Transport: A Bibliography". College of Engineering Energy Center, included with Monthly Progress Report 78-1105-1, January 1978.

Crowl, D.A.; Mickelson, R.W.; Piccirelli, R.A. "Preliminary Design for a Multi-kilogram Furnace". College of Engineering Energy Center, included with Monthly Progress Report 78-1105-1, January 1978.

Crowl, D.A.; Yee, K.; Piccirelli, R.A.; Leffert, C.B. "An Investigation of Oil and Gas Yield as a Function of Heating Rate". College of Engineering Energy Center, included with Monthly Report 78-1105-1, January 1978.

Crowl, D.A.; Piccirelli, R.A. "Transient Pressure Profiles for the Non-Porous, Shrinking Core Model". College of Engineering Energy Center, Submitted with Quarterly Progress Report 78-1105-4, April 1978.

Crowl, D.A.; Piccirelli, R.A. "Steady State Pressure Profiles for Non-Isothermal Conditions". College of Engineering Energy Center, submitted with Monthly Progress Report, 78-0115-5, May 1978.

Crowl, D.A.; Piccirelli, R.A. "An Initial Pyrolysis Model with Coupled Mass and Energy Transport: The Shrinking Core Configuration". College of Engineering Energy Center, submitted with Monthly Progress Report, 78-1105-6, June 1978.

Crowl, D.A.; Piccirelli, R.A. " Distributed Parameter Model of the Retorting of Oil Shale Slabs". College of Engineering Energy Center, included with Quarterly Progress Report, 78-1105-8, June 1978.

Crowl, D.A.; Piccirelli, R.A.; Kwon, O.S. "Application of the Unreacted-Core Shrinking Model Combustion of Michigan Oil Shale". College of Engineering Energy Center, included with Quarterly Progress Report, 78-1105-8, June 1978.

Crowl, D.A.; Piccirelli, R.A.; Kwon, O.S. "Modifying the Spherical, Unreacted, Shrinking Model to Combustion of Michigan Oil Shale". College of Engineering Energy Center, submitted with Monthly Progress Report, 78-1105-10, September 1978.

Crowl, D.A.; Piccirelli, R.A. "A Preliminary Look at the Energy Utilization in Antrim In-Situ Retorting". College of Engineering Energy Center, Report 78-1105-12, October 1978.

Crowl, D.A.; Piccirelli, R.A. "A Combined Pyrolysis--Combustion Model". College of Engineering Energy Center, Report CEEC 79-4, June 1979.

Crowl, D.A.; Piccirelli, R.A. "Implementation and Evaluation of Codes for Rubblized Retorts". College of Engineering Energy Center, Report CEEC 79-6, August 1979.

Crowl, D.A.; Hoenle, W.F.; Mickelson, R.W. "The Stoichiometry of the Pyrolysis of Michigan Oil Shale". College of Engineering Energy Center, Report CEEC 79-5, July 1979.

Crowl, D.A.; Piccirelli, R.A. "Implementation and Utilzation of the Sandia In-Situ Crack Retort Code". College of Engineering Energy Center, Report 79-3, June 1979.

Crowl, D.A.; Piccirelli, R.A. "Transport Processes in Pyrolysis of Antrim Oil Shale". *J. Energy Commun.* 1979, 5(6).

Crowl, D.A.; Piccirelli, R.A. "Applications of Computer Models to the retorting of Oil Shale". In "Advances in Computer Methods for Pre-Differential Equations", 3rd Ed. 1979; 341-350.

Crowl, D.A.; Hoenle, W.F. "Stoichiometry of the Pyrolysis of Michigan Oil Shale". *In Situ* 1980, in press.

CULBERTSON, WILLIAM J.

Nevens, T.D.; Culbertson, W.J.; Wallace, J.R.; Taylor, G.C.; Jovanovich, A.P.; Prien, C.H.; Hicks, R.E.; Probstein, R.F. "Predicted Costs of Environmental Controls for a Commercial Oil Shale Industry", Vol. I: "An Engineering Analysis". In "Environmental Control Costs for Oil Shale Processes". U.S. Department of Energy Assistant Secretary for Environment, Office of Technology Impacts, DOE Report No. DOE/EV-0055, Washington, DC, October 1979.

DANA, PETER

Dana, P.; Smith, J.W.; Trudell, L.G. "Shallow Oil Shale Deposits of the Southern Uinta Basin, Utah", (drafted) to be published by the U.S. Government as a report of investigation, June 1980.

DAVIS, GEORGE H.

Davis, G.H.; Velikanov, A.L. "Hydrological Problems Arising from the Development of Energy". UNESCO Technical Papers in Hydrology #17.

Davis, G.H.; Kilpatrick, F.A. "Water Supply as a Limiting Factor in Western Energy Development". Water Resources Bulletin.

DAVIS, GRANT

Davis, G. "Oil Shale". Reclamation of Drastically Disturbed Lands, Ch. 33, pp. 609-618, ASA-CSSA-SSA, 1978.

DEAN, WALTER E.

Dean. W.E.; Ringrose, C.D.; Klusman, R.W. "Geochemical Variation in Soils in the Piceance Creek Basin, Western Colorado". *U.S. Geol. Survey Bull.* 1979, 1479, 46 pp.

Dean, W.E.; Donnell, J.R. "Geochemical Variation Within the Garden Gulch Member of the Green River Formation, USGS Core CR-2, Piceance Creek Basin, Rio Blanco County, Colorado". *Geochemical Survey of the Western Energy Regions*, Fifth Annual Progress Report, July 1978: U.S. Geol. Survey Open-file Report 78-1105, 57-71.

DEMOU, SAM

Demou, S. (Project Officer); Miller, R.J.; Wang, F.D.; Sladek, T.; Young, C. (authors). "The Effect of In Situ Retorting on Oil Shale Pillars". Interim Report, prepared for U.S. Dept. of Interior, Bureau of Mines, Contract No. H0262031, March 1979.

de NEVERS, NOEL

de Nevers, N. "Analysis of the Environmental Control Technology for Tar Sand Development". DOE document COO-4043-2, submitted June 1979, in press.

de Nevers, N. "Alternative PSD Policies", *JAPCA*, November 1979.

DENNY, DALE A.

Denny, D.E.; McGinnity, J. "Hazardous Air Pollutants", presented at American Association of Textile Chemists and Collarists Conference, Charlotte, NC, March 1980.

DESBOROUGH, GEORGE A.

Desborough, G.A.; Poole, F.G.; Hose, R.K.; Radtke, A.S. "Metals in Devonian Kerogenous Marine Strata at Gibellini and Bisoni Properties in Southern Fish Creek Range, Eureka County, Nevada". USGS Open File Report 79-530, 1979.

DEVINE, MICHAEL D.

Devine, M.D. et al. Managers, *Energy from the West*. Washington, DC: U.S. Environmental Protection Agency.

Summary Report, 1979 (EPA-600/9-79-027).

Policy Analysis Report, 1979 (EPA-600/7-79-083).

Impact Analysis Report, 1979 Vol. I: *Introduction and Summary* (EPA-600/7-79-082a) Vol. II: *Site Specific and Regional Impact Analysis* (EPA-600/7-79-082b).

Energy Resource Development Systems Report, 1979 Vol. I: *Introduction and General Social Controls* (EPA-600/ 7-79-060a) Vol. II: *Coal* (EPA-600/7-79-060b) Vol. III: *Oil Shale* (EPA-600/7-79-060c) Vol. IV: *Uranium* (EPA-600/7-79-060d) Vol. V: *Oil and Natural Gas* (EPA-600/7-79-060e) Vol. VI: *Geothermal* (EPA-600/7-79-060f).

Work Plan for Completing a Technology Assessment of Western Energy Resource Development, 1978 (EPA-600/7-78-012).

DICKSON, PHILLIP F.

Smith, P.D.; Dickson, P.F.; Yesavage, V.F. "Steam Pyrolysis of Shale Oil Vacuum Distillates for Petrochemical Intermediates Production". Proceedings ACS Division of Fuel Chemistry, Anaheim, CA, 1978.

Griswold, C.F.; Kavianian, H.; Ballut, A.; Yesavage, V.F.; Dickson, P.F. "The Effects of Hydrodenitrification on Steam Pyrolysis of a Simulated In Situ Shale Oil Vacuum Distillate", presented at 86th National AIChE Meeting, 1979.

Griswold, C.F.; Ballut, A.; Kavianian, H.R.; Dickson, P.F.; Yesavage, V.F. "Studies on the Utilization of Hydrogenated Shale Oil as a Steam Pyrolysis Feedstock for the Production of Light Olefins". *Ener. Commun.* 1980, 6(2).

DIETZ, DONALD R.

Dietz, D.R.; Barker, L.K.; Hoffman, E.G.; Elderkin, R.L. "Assessment of Oil Shale Development: A Problem in Statistical Design", Proceedings, U.S. Dept. of Energy Statistical Symposium, Richland, WA and Pacific Northwest Laboratories, 1978, 87-114.

Dietz, D.R. "Interdisciplinary Developmental and Ecological Assessment: A Prerequisite to Effective Design of Environmental Mitigation". Mitigation Symposium General Technical Report, RM-65, National Workshop on Mitigating Losses of Fish and Wildlife Habitats, July 1979, Colorado State University, Ft. Collins, CO, published by Rocky Mountain Forest and Range Experiment Station, Forest Service, U.S. Dept. of Agriculture, Ft. Collins, CO.

DITTBERNER, PHILLIP L.

Dittberner, P.L. Institute of Land Rehabilitation, "Rehabilitation of Western Wildlife Habitat: A Review". Western Energy and Land Use Team, Office of Biological Services, U.S. Dept. of Interior, U.S. Fish & Wildlife Service, Ft. Collins, CO, 237 pp.

DOCKTER, LEROY

Dockter, L. "Status Report on the Hanna III and Hanna IV Underground Coal Gasification Experiments", Proceedings of the 4th Annual Underground Coal Conversion Symposium, July 1978.

Dockter, L. "A Mathematical Model of Forward Combustion Retorting of Oil Shale". LETC/TPR-78/1, July 1978.

Dockter, L. "Status of the Fourth Underground Coal Gasification Experiment at Hanna, WY", presented at 53rd Annual Fall Technical Conference of the Society of Petroleum Engineers, SPE7510, October 1978.

Dockter, L. "Combustion Rates for Oil Shale Carbonaceous Residue". *In Situ* 1978, 2(3).

Dockter, L. "DOE-Sponsored In Situ Shale Oil Recovery Projects". ANS transactions, Vol. 30, 1978.

Dockter, L. "Reverse Combustion Oil Shale Retorting". LETC/RI-79/1, June 1979.

DONNELL, JOHN

Donnell, J. "Western United States Oil Shale Resources and Geology", presented at the Institute of Gas Technology Symposium Atlanta, GA, December 1979, in press.

Donnell, J. "Benefits and Contraints of Oil Shale Tar Sand Development in Arid Areas", presented at Conference on Alternative Strategies for Desert Development and Management, sponsored by UNITAR and the State of California, held in Sacramento, June 1977, in press.

Dean, W.; Donnell, J. "Geochemical Variation within the Garden Gulch Member of the Green River Formation, USGS Corp. CR-2, Piceance Great Basin, Rio Blanco County, Colorado". Geochemical Survey of the Western Energy Regions, USGS Open File Report 78-1105, 1978, 57-71.

ECHOLS, JAMES

Revegetation Conference Proceedings, Steamboat Springs, CO, for Oil Shale and Coal. Out of print.

EPLER, JAMES L.

Epler, J. L.; Winton, W.; Hardigree, A.A.; Larimer, F.W. "The Appropriate Use of Genetic Toxicology in Industry". In "The Scientific Basis of Toxicity Assessment"; Elsevier, in press.

Epler, J.L.; Larimer, F.W.; Rao, T.K.; Nix, C.E.; Ho, T. "Energy-Related Pollutants in the Environment: The Use of Short-term Tests for Mutagenicity in the Isolation and Identification of Biohazards". Environ. Health Perspec. 1978, 27, 11-20.

Epler, J.L.; Ho, T.; Hsie, A.W.; Larimer, F.W.; Nix, C.E.; Rao, T.K. "Short-term Mutagenicity Testing", Proceeding of the Symposium on Potential Health and Environmental Effects of Synthetic Fossil Fuel Technologies. ORNL Conf.-780903, Gatlinburg, TN, September 1978, 129-136.

Guerin, M.R.; Epler, J.L.; Griest, W.H.; Clark, B.R.; Rao, T.K. "Polycyclic Aromatic Hydrocarbons from Fossil Fuel Conversion Processes". Carcinogenesis, Vol. 3; Jones, P.W.; Freudenthal, R.I., Eds; Raven Press: New York, 1978, 21-35.

Guerin, M.R.; Clark, B.R.; Ho, C-h.; Epler, J.L.; Rao, T.K. "Short-Term Bioassay of Complex Organic Mixtures", Part I Chemistry: Proceedings of the Symposium on Application of Short-Term Bioassay in the Fractionation and Analysis of Complex Environmental Mixtures, Williamsburg, VA, EPA-60019-78-027, September 1978.

Rao, T.K.; Allen, B.E.; Ramey, D.W.; Epler, J.L.; Guerin, M.R.; Rubin, I.B.; Clark, B.R. "Analytical and Biological Analysis of Test Material from the Synthetic Fuel Technologies III. Use of Sephadex LH-20 Gel Chromatography Technique for the Bioassay of Crude Synthetic Fuels". Mutat. Res., in press.

Ho, C.-h.; Ma, C.Y.; Clark, B.R.; Guerin, M.R.; Rao, T.K.; Epler, J.L. "Separation of Neutral Nitrogen Compounds from Synthetic Crude Oils for Biological Testing". Env. Res., in press.

Rao, T.K.; Epler, J.L.; Schmidt-Collerus, J.J.; Leffler L.; Guerin, M.R. "Biological Monitoring of Oil Shale Products and Effluents Using Short-term Genetic Analyses", Proceedings of the EPA Oil Shale Sampling, Analysis and Quality Assurance Symposium, Denver, CO, March 1979.

Rao, T.K.; Epler J.L.; Eatherly, W.P. "Mutagenicity Testing of Extracts from Petroleum and Coal, Tar Pitches", Proceedings of the 14th Carbon Conference, Pennsylvania State University, June 1979.

Ho, C.-h.; Guerin, M.R.; Clark, B.R.; Rao, T.K.; Epler, J.L. "Aromatic Amines and N-heterocyclics Identified as Important Mutagens in Synthetic Crude Oils". Environ. Res., in press.

Rao, T.K.; Young, J.A.; Weeks, C.E.; Slaga T.J.; Epler, J.L. "Effect of the Cocarcinogen Benzo(a)Pyrene on Microsome-mediated Chemical Mutagenesis in Salmonella typhimurium". Environ. Mutagen. 1979, 1, 105-112.

Rao, T.K.; Larimer, F.W.; Nix, C.E.; Epler, J.L. "Mutagenicity Testing of Aqueous Materials from Alternate Fuel Production", Proceedings of the Symposium in Analysis of Water Associated with Alternate Fuel Production (ASTM-Committee D-19), Pittsburgh, PA, June 1979.

Epler, J.L. "The Use of Short-Term Tests in the Isolation and Identification of Chemical Mutagens in Complex Mixtures". In "Chemical Mutagens: Principles and Methods for their Detection", Vol. 6; de Serres, F.J., Ed. Plenum Press: New York.

Rao, T.K.; Allen, B.E.; Cox, J.T.; Dorsey G.F.; Epler, J.L. "Chemical Structure Activity Relationships to Mutagenic/Carcinogenic Properties of Certain Industrial and Environmental Chemical Agents", presented at 7th annual SECRA meeting, Atlanta, GA, November 1979.

Griest, W.H.; Olerich, G.; Epler, J.L.; Rao, T.K. "Characterization of Multialkylated Polycyclic Aromatic Hydrocarbons in Energy-related Materials", Abstract, III International Symposium on Polynuclear Aromatic Hydrocarbons, 1978.

Epler, J.L.; Rao, T.K. "The Use of Short-Term Biological Tests in the Isolation and Identification of Organic Toxicants in Complex Mixtures", presented at Conference on Sampling and Analysis of Toxic Organics in the Atmosphere, Boulder, CO, August 1979.

FARRIER, DAVID G.

Manahan, S.E.; Poulson, R.E.; Green, J.B.; Farrier, D.S. "Coal Humic Substances and their Application to Pollution Control in the Synthetic Fuels Industry. I. Review. II. Byproduct Water Treatment". Department of Energy, Laramie Energy Technology Center Report of Investigations No. LETC/RI-78/5, September 1978; available through the National Technical Information Service.

Manahan, S.E.; Poulson, R.E.; Farrier, D.S.; Green, G.B. Preprints, Div. of Fuel Chemistry, Amer.Chem. Soc. 1978, 23(2), 187.

Farrier, D.S.; Virgona, J.E.; Phillips, T.E.; Poulson, R.E. 11th Oil Shale Symposium Proceedings, Colorado School of Mines Press, 1978, 8199 pp.

Nelson, K.F.; North, D.S.; Payne, G.R.; Anderson, A.D.; Poulson, R.E.; Farrier, D.S. "The Effect of an In Situ-Produced Oil Shale Processing Water on Metabolism". Arch. Environm. Contam. Toxicol. 1978, 7, 273.

Fox, J.P.; Farrier, D.S.; Poulson, R.E. "Chemical Characterization and Analytical Considerations for an In Situ Oil Shale Process Water". Laramie Energy Technology Center Report of Investigations No. LETC/RI-78/7, November 1978; available through the National Technical Information Service.

Stuber, H.A.; Leenheer, J.A.; Farrier, D.S. "Inorganic Sulfur Species in Waste Waters from In Situ Oil Shale Processing". J. Environ. Sci. Health 1978, A13(9), 663-675.

Farrier, D.S.; Hines, A.L.; Wang, S.W. "Adsorption of Phenol and Benzoic Acid from Dilute Aqueous Solution onto a Macroreticular Resin". J. Colloid and Interface Sci. 1978, 69, 233.

Bergman, H.L.; DeGraeve, G.M.; Anderson, A.D.; Farrier, D.S. "Effects of Complex Effluents from In Situ Fossil Fuel Processing on Aquatic Biota", Proceedings of the First Life Sciences Symposium on Potential Health and Environmental Effects of Synthetic Fossil Fuel Technologies, Gatlinburg, TN, September 1978.

Farrier, D.S.; Harrington, L.W.; Poulson, R.E. "Integrated Compliance and Control Technology Research Activities for In Situ Fossil Fuel Processing Experiments", Proceedings of the U.S. DOE Environmental Control Symposium, Washington, DC, November 1978.

Leenheer, J.A.; Farrier, D.S. "Applications of Dissolved Organic Carbon Fractionation Analysis to the Characterization of Oil Shale Processing Waters", Proceedings of the EPA Symposium on Oil Shale Sampling, Analysis and Quality Assurance, Denver, CO, March 1979.

Farrier, D.S.; Fox, J.P.; Poulson, R.E. "Interlaboratory, Multimethod Study of an In Situ-Produced Oil Shale Process Water", Proceedings of EPA Symposium on Oil Shale Sampling, Analysis and Quality Assurance, Denver, CO, March 1979.

Gauger, W.K.; Williams, S.E.; Farrier, D.S.; Adams, J.C. "An Analytical Method for Assessing the Quality, by Microbial Evaluation, of Aqueous Effluents Obtained from an In Situ Oil Shale Process", Proceedings of the EPA Symposium on Oil Shale Sampling, Analysis and Quality Assurance, Denver, CO, March 1979.

Hepler, D.I.; Schafer, A.S.; Larson, K.A.; Farrier, D.S. "Toxicological Evaluation of an In Situ Oil Shale Process Water", 12th Oil Shale Symposium Proceedings, Colorado School of Mines Press, 1979.

Williams, S.E.; Gauger, W.K.; Farrier, D.S. "Microbial Interactions with Aqueous Effluents Derived from In Situ Fossil Fuel Processing", 12th Oil Shale Symposium Proceedings, Colorado School of Mines Press, 1979.

Skinner, Q.D.; Moore, T.S.; Asplund, R.O.; Sexton, J.C.; Farrier, D.S. "Phytotoxicity and Plant Response to Aqueous Effluents Derived from an In Situ Oil Shale Process Water", 12th Oil Shale Symposium Proceedings, Colorado School of Mines Press, 1979.

Nelson, K.F.; North, D.S.; Farrier, D.S. "The Concentration Dependence of the Effect of an In Situ Oil Shale Process Water on Metabolism". Bulletin of Environ. Contam. Toxicol. 1979, in press.

Wang, S.W.; Hines, A.L.; Farrier, D.S. "Adsorption of Aliphatic Acids from Aqueous Solutions onto Activated Carbon". J. Eng. Data 1979, in press.

Anderson, A.D.; Lebsack, M.E.; DeGraeve, G.M.; Farrier, D.S.; Bergman, H.L. "Toxicity of an In Situ Oil Shale Process Water to Rainbow Trout and Fathead Minnows". Arch. Environ. Contam. Toxicol. 1979, in press.

Hepler, D.I.; Schafer, A.S.; Larson, K.A.; Farrier, D.S. "Animal Toxicity Evaluation of an In Situ Oil Shale Retort Water". Dept. of Energy, Laramie Energy Technology Center Report of Investigations No. LETC/RI-79/4, 1979.

Skinner, Q.D.; Moore, T.S.; Asplund, R.O.; Sexton, J.C.; Farrier, D.S. "Plant Responses to Aqueous Effluents Derived from In Situ Fossil Fuel Processing. I. Development of Screening Methods". Dept. of Energy, Laramie Energy Technology Center Report of Investigations No. LETC/RI-79/5, 1979.

Lebsack, M.E.; Anderson, A.D.; Nelson, K.F.; Farrier, D.S. "Sublethal Effects of an In Situ Oil Shale Process Water on Rainbow Trout", submitted for publication in Toxicol. Appl. Pharmacol. 1979.

Farrier, D.S. "Application of Radiotracer Techniques: A Method for Achieving Uniform Analytical Sensitivity in Studies Using Radioactive Solutes at Varying Concentration". In preparation, 1979.

FEDER, GERALD L.

McNeal, J.M.; Feder, G.L. "Stream Sediment Geochemistry in the Oil Shale Region, Colorado and Utah", presented at Annual Convention of American Geophysical Union, Miami, FL, 1979.

FERGUSON, ROBERT B.

Frischknecht, N.C.; Ferguson, R.B. "Revegetating Processed Oil Shale and Coal Spoils on Semi-Arid Land". USDA Forest Service/EPA Interagency Energy/Environment R&D Program Report EPA-600/7-79-068, February 1979, 47 pp.

FOX, J. PHYLLIS

Fox, J.P.; Farrier, D.S.; Poulson, R.E. "Chemical Characterization and Analytical Considerations for an In Situ Oil Shale Process Water". LETC/RI-78/7, 1978.

Fox, J.P.; Mason, K.K.; Thomas, J.F. "Partitioning of Major, Minor and Trace Elements During Simulated In Situ Oil Shale Retorting", Proceedings of the 12th Oil Shale Symposium, Colorado School of Mines, Golden, CO, 1979.

Mead, S.E.; Farrier, D.S.; Fox, J.P. "The State-of-the-Art for Controlling the Wastewater Produced During the Production of Shale Oil". Proceedings of the 12th Oil Shale Symposium, Colorado School of Mines, Golden, CO, 1979.

Fox, J.P. "Retort Water Particulates", Proceedings of the EPA Symposium on Oil Shale Sampling, Analysis and Quality Assurance, Denver, CO, March 1979.

Girvin, D.C.; Hadeishi, T.; Fox, J.P. "Use of Zeeman Atomic Absorption Spectroscopy for the Measurement of Mercury in Oil Shale Offgas", Proceedings of the 12th Oil Shale Symposium: Sampling, Analysis and Quality Assurance, Denver, CO, March 1979.

Fox, J.P.; Evans, J.C.; Fruchter, J.S.; Wildeman, T.R. "Interlaboratory Study of Elemental Abundances in Raw and Spent Oil Shales", Proceedings of the EPA Symposium on Oil Shale Sampling, Analysis and Quality Assurance, Denver, CO, March 1979.

Fox, J.P. "The Elemental Composition of Oil Shale Retort Waters", presented at the ASTM Symposium on Analysis of Waters Associated with Alternate Fuel Production, Pittsburgh, PA, June 1979.

Fox, J.P.; Persoff, P.; Moody, M.M.; Sisemore, C.J. "A Strategy for the Abandonment of Modified In Situ Oil Shale Retorts", Proceedings of the Environmental Control Symposium, Washington, DC, November 1978.

FRANKLIN, RALPH

Franklin, R. "Environmental Impacts of Oil Shale Technologies", Proceedings, Institute of Environmental Sciences, 1979.

Franklin, R. "Fuel Cycles: Environmental Sources of Trace Elements", International Symposium on Trace Element Stress in Plants, UCLA, 1979.

Franklin, R. "Department of Energy Oil Shale RD&D Program Management Plan".

FRISCHKNECHT, NEIL C.

Frischknecht, N.C.; Ferguson, R.B. "Revegetating Processed Oil Shale and Coal Spoils on Semi-Arid Land". USDA Forest Service/EPA Interagency Energy/Environment R&D Program Report EPA-600/7-79-068, February 1979, 47 pp.

FRUCHTER, JONATHAN

Fruchter, J.S.; Wilkerson, C.L.; Evans, J.C.; Sanders, R.W.; Abel, K.H. "Source Characterization Studies at the Paraho Semiworks Oil Shale Retort". PNL-2945, Pacific Northwest Laboratory, Richland, WA, 1979.

Fruchter, J.S.; Wilkerson, C.L.; Evans, J.C.; Sanders, R.W. "Analysis of Oil Shale Products and Effluents: An Example of the Multitechnique Approach", Proceedings of the EPA Oil Shale Sampling, Analysis and Quality Assurance Symposium, Denver, CO, March 1979.

Fruchter, J.S.; Wilkerson, C.L.; Evans, J.C.; Sanders, R.W. "Analysis of Oil Shale Products and Effluents from an Aboveground Oil Shale Retort Pilot Plant", submitted for publication in Environ. Sci. Technol. 1980.

Wilkerson, C.L.; Evans, J.C.; Sanders, R.W.; Fruchter, J.S. "Preparation and Multi-element Characterization of a Colorado Oil Shale Reference Material", submitted for publication in Anal. Chem. 1980.

Fox, J.P.; Evans, J.C.; Fruchter, J.S.; Wildeman, T.R. "Intercomparison Study of Elemental Abundances in Raw and Spent Oil Shales". Anal. Chim. Acta, in press.

GALLOWAY, TERRY R.

Galloway, T.R. "Oil Yield Loss Mechanisms in Modified In Situ Retorting of Oil Shale: The Challenge of Efficiently Retorting Very Non-Uniform Beds of Oil Shale Rubble", presentated at the AIChE Meeting, April 1979, Houston, TX, January 1979.

Galloway, T.R. "Retorting of Broad Sized Shale at LLL", presented at the Oil Shale Conversion Symposium, Grand Junction, CO, December 1978.

Galloway, T.R. "LLL Progress Toward Process Control of Commercial Modified In Situ Retort Operations for High Yield", presented at the 12th Oil Shale Symposium, Golden, CO, April 1979.

Galloway, T.R. "Predicting Solar Energy Fluxes in Polluted Urban Areas", presented at the 14th Intersociety Energy Conversion Engineering Conference, Boston, MA, August 1979.

GARY, JAMES H.

Gary, J.H. "Comparison of Shale Oil Projects Under Consideration for Commercial Development", presented at AIME National Meeting, February 1979.

GIRVIN, DONALD

Girvin, D.C.; Hodgson, A.T.; Fox, J.P. "Distribution of As, Cd, Hg, Pb, Sb, and Se During Simulated In Situ Oil Shale Retorting". Quarterly Progress Report, October 1 to December 31, 1978, UCID-8106.

Girvin, D.C.; Hadeishi, T.; Fox, J.P. "Use of Zeeman Atomic Absorption Spectroscopy for Measurement of Mercury in Oil Shale Offgas", Proceedings of the EPA Symposium on Oil Shale Sampling, Analysis, and Quality Assurance, Denver, CO, March 1979.

GODDARD, KIMBALL E.

Goddard, K.E. "Use of Mathematical Models to Predict the Impact of the Mining of Energy Minerals on Hydrology in Northwest Colorado", presented at the annual meeting of the Society of Mining Engineers of AIME, New Orleans, LA, February 1979.

GRADY, DENNIS E.

Grady, D.E.; Hollenbach, R.E. "Dynamic Fracture of Rock," Geophys. Res. Let. 1979, 6, 73.

Grady, D.E.; Kipp, M.E.; Smith, C.S. "Explosive Fracture Studies of Oil Shale". In "Proceedings of the Society of Petroleum Engineers". SPE8215, 1979.

Grady, D.E.; Kipp, M.E. "The Micromechanics of Impact Fracture of Rock". Int. J. Rock Mech. Min. Sci. 1979, 16, 293.

Grady, D.E.; Kipp, M.E. "Continuum Modeling of Explosive Fracture of Oil Shale". Int. J. Rock Mech. Min. Sci. 1980, in press.

GRAFF, GREG J.

Bessinger, G.; Graff, G.; Bergmann, K. "Superior Oil Company Land Exchange and Oil Shale Resources Development Environmental Impact Assessment". Published by U.S. Dept. of Interior, Denver, CO, June 1979, 102 pp.

GRAY, S. LEE

Gray, S.L.; Sparling, E.W.; Whittlesey, N.K. "Water for Energy Development in the Northern Great Plains and Rocky Mountain Regions", unpublished report, Natural Resource Economics, ESCS, USDA.

GUERIN, MICHAEL R.

Guerin, M.R. "Energy Sources of Polycyclic Aromatic Hydrocarbons". In "Polycyclic Hydrocarbons and Cancer", Vol. 1, pp. 3-42, Academic Press: New York, 1978.

Guerin, M.R.; Stokely, J.R.; Higgins, C.E.; Moneyhun, J.H.; Holmberg, R.W. "Inhalation Bioassay Chemistry--Walton Horizontal Smoking Machine for Inhalation Exposure of Rodents to Cigarette Smoke". J. Natl. Canc. Inst. 1979, 63(2), 441-448.

Ho, C.-h.; Clark, B.R.; Guerin, M.R.; Ma, C.Y.; Rao, T.K. "Aromatic Nitrogen Compounds in Fossil Fuels--A Potential Hazard?". pp. 281-291 in American Chemical Society, Division of Fuel Chemistry, Vol. 24, No. 1, Preprints of Papers Presented at Honolulu, HI, April 1979.

Clark, B.R.; Horton, A.D.; Guerin, M.R.; McBay, E.H. et al. "The Nature of Stack Emissions from the Experimental-Scale Combustion of Crude Oils", Proceedings of the Symposium on Potential Health and Environmental Effects from Synthetic Fossil Fuels Technologies, September 1978, CONF-780903, July 1979, 116-124.

Coffin, D.L.; Guerin, M.R.; Griest, W.H. "The Interagency Program in Health Effects of Synthetic Fossil Fuels Technologies: Operation of a Materials Repository", Proceedings of the Symposium on Potential Health and Environmental Effects from Synthetic Fossil Fuels Technologies, September 1978, CONF-780903, July 1979, 153-156.

Griest, W.H.; Guerin, M.R.; Clark, B.R.; Ho, C.-h.; Rubin, I.B.; Jones, A.R. "Relative Chemical Composition of Selected Synthetic Crudes", Proceedings of the Symposium on Assessing the Industrial Hygiene Monitoring Needs for the Coal Conversion and Oil Shale Industries, Brookhaven National Laboratory, Upton, NY, November 1978, BNL-51002; March 1979, 61-78.

Griest, W.H.; Guerin, M.R.; et al. "Identification and Quantification of Polynuclear Organic Matter (POM) on Particulates from a Coal-Fired Power Plant". EPRI Report EA-1092, June 1979.

Stokely, J.R.; Moneyhun, J.H.; Guerin, M.R.; Florant, L.; Greenspan, J. "Description and Characteristics of the Walton Horizontal Inhalation Exposure Smoking Maching". ORNL-5424, October 1979, 1-17.

Guerin, M.R.; Caton, J.E.; Dalbey, W.E.; "Animal Containment Vessels for Nose-Only Inhalation Bioassay Exposure to Tobacco Smoke". ORNL-5424, October 1979, 35-46.

Stokely, J.R.; Guerin, M.R.; Bayne, C.K. "Influence of Smoking Configuration on Particulate Delivery". ORNL-5424, October 1979, 131-135.

Stokely, J.R.; Guerin, M.R.; Pair, D.D. "Carbon Monoxide and Carbon Dioxide Concentrations in Smoke as a Function of Inhalation Exposure Using Mice". ORNL-5424, October 1979, 137-147.

Guerin, M.R. "Analytical Coal Chemistry". ORNL Coal Chemistry Report, Keller, O.L., Ed., 1979, in press.

Guerin, M.R. "Environmental and Health Aspects of Coal Conversion". ORNL Coal Chemistry Report, Keller, O.L., Ed., 1979, in press.

Guerin, M.R. "Analytical Chemistry Division Research & Development Summary for February 1979; Bio/Organic Analysis Section". ORNL/CF-79/62, March 1979.

Guerin, M.R. "Analytical Chemistry Division Research & Development Summary for June 1979; Bio/Organic Analysis Section". ORNL/CF-79/235, July 1979.

Jenkins, R.A.; Quincy, R.B.; Guerin, M.R. "Selected Constituents in the Smokes of U.S. Commercial Cigarettes: 'Tar', Nicotine, Carbon Monoxide, and Carbon Dioxide". ORNL/TM-6870, April 1979.

Guerin, M.R. "Bioassay Chemistry of Complex Mixtures". USDOE/DBER Contractor Meeting-Workshop on Review and Development of Biotesting Programs for Energy Utilization, Boca Raton, FL, November 1978.

Guerin, M.R. "Mutagenic Constituents of Synthetic Oils". BETC 1979 Spring Seminars on Fossil Energy Research, Bartlesville Energy Technology Center, Bartlesville, OK, May 1979.

Guerin, M.R. "Mutagenic Constituents of Synthetic Oils", presented in Seminar, E.I. DuPont de Nemours Company, Wilmington, DE, May 1979.

Guerin, M.R.; Clark, B.R.; Ho, C.H. "Quest for Determinant Mutagens in Synfuels", presented in Analytical Chemistry Division Annual Information Meeting, June 1979.

Guerin, M.R.; Clark, B.R.; Griest, W.H. "Chemical Characterization in Problem Identification", presented in ACS National Meeting, Symposium on Occupational Health Control in Fossil Energy Technologies, Washington, DC, September 1979.

Coffin, D.L.; Guerin, M.R.; Griest, W.H. "The Interagency Program in Health Effects of Synthetic Fossil Fuels Technologies: Operation of a Materials Repository", presented in Symposium on Potential Health and Environmental Effects of Synthetic Fossil Fuel Technologies, Gatlinburg, TN, September 1978.

Griest, W.H.; Guerin, M.R.; Clark, B.R.; Ho, C.-h.; Rubin, I.B.; Jones, A.R. "Relative Chemical Composition of Selected Synthetic Crudes", presented in Symposium on Assessing the Industrial Hygiene Monitoring Needs for the Coal Conversion and Oil Shale Industries, Brookhaven National Laboratory, Upton, NY, November 1978.

Rao, T.K.; Epler, J.L.; Schmidt-Collerus, J.J.; Leffler, L.; Guerin, M.R. "Biological Monitoring of Oil Shale Products Effluents Using Short-Term Genetic Analyses". EPA Oil Shale Sampling, Analysis, and Quality Assurance Symposium, Denver, CO, March 1979.

Ho, C.H.; Clark, B.R.; Guerin, M.R.; Ma, C.Y.; Rao, T.K. "Aromatic Nitrogen Compounds in Fossil Fuels--A Potential Hazard?", presented in National ACS Meeting, Honolulu, HI, April 1979.

Griest, W.H.; Guerin, M.R. "The USEPA/DOE Fossil Fuel Research Materials Facility: Distribution of Paraho Oil Shale and SOHIO-Refined Paraho Shale OIl Materials", presented in EPA/ORNL Repository Meeting: A Matrix Approach to Biological Investigation of Synfuels, Research Triangle Park, NC, April 1979.

HABENICHT, CHARLES H.

Cotter, J.E.; Powell, D.J.; Habenicht, C.H. "Fugitive Dust at the Paraho Oil Shale Demonstration Retort and Mine". EPA-600/ 7-79-208, October 1979.

Culbertson, W.J.; Habenicht, C.H.; Nevens, T.D. "Spent Oil Shale Ash Slurry for Grouting Retorted Rubble of In Situ Retorts". Proprietary, June 1979.

Pressey, R.E.; Habenicht, C.H.; Prien, C.H. "Results of EPA's Preliminary Environmental Assessment at the Paraho Oil Shale Demonstration Retort", presented at 71st Annual AIChE Meeting, Miami Beach, FL, November 1978.

Cotter, J.E.; Powell, D.J.; Habenicht, C.H. "Sampling and Analysis for Retort and Combustion Gases at the Paraho Shale Oil Demonstration Plant". U.S. EPA-IERL-ORD, August 1978.

Cotter, J.E.; Prien, C.H.; Schmidt-Collerus, J.J.; Powell, D.J.; Sung, R.; Habenicht, C.H.; Pressey, R.E. "Sampling and Analysis Research Program at the Paraho Shale Oil Demonstration". EPA-600/ 7-78-065, April 1978.

HAINES, WILLIAM E.

Haines, W.E.; Lathan, D.R. "Non-Metal Elements and Compounds". *Anal. Chem.* 1979, 51, 231R-238R.

HANSON, RAY L.

Hanson, R.L. "Characterization of Potential Organic Emissions from a Low-BTU Gasifier for Coal Conversion". In Polynuclear Aromatic Hydrocarbons; Jones P.W.; Leber, P., Eds.; Ann Arbor Science Publishers, Ann Arbor, 1979.

Hanson, R.L. "Studies of Organic Material Present in the Exhaust Stream of an Experimental Fluidized Bed Coal Combustor". *J. Environ. Science and Health* 1979, A14(4), 223-250.

HARAK, ARNOLD

Harak, A. "Results of Tracer Tests, Pressure Drop Measurements, and Gas Sample Probe Analysis in Evaluating Oil Shale Rubble Column Porosity During Retorting". U.S. Department of Energy, in press.

Harak, A. "An Overview In Situ Recovery Research at LERC", Proceedings of ASME, Energy Technology Conference and Exhibition, Houston, TX, November 1978.

Harak, A. et al. "Evaluation of Spent Shale Compaction for Void Volume Generation in In Situ Oil Shale Processing". *Colorado School of Mines Quarterly*, October 1978.

Harak, A. et al. "Bed Preparation Concepts for True In Situ Oil Shale Processing: An Evaluation of Current Technology". Preprint: Meeting of SPE, Las Vegas, NV, Fall 1979.

Harak, A. et al. "In Situ Void Volume Generation by the Explosive Compaction of Spent Shale". Preprint: 54th Annual Technical Conference and Exhibition of SPE, Las Vegas, NV, September 1979.

Harak, A. et al. "Oil Shale Dynamic Toughness Measurements". Submitted to 20th Rock Mechanics Symposium, Austin, TX, June 1979.

Harak, A. et al. "DOE-Sponsored In Situ Shale Oil Recovery Projects". American Nuclear Society Trans. 1978, 30.

HARNEY, BRIAN M.

Gorbaty, M.L.; Harney, B.M. Eds., "Refining of Synthetic Crudes". Advances in Chemistry Series #179, American Chemical Society: Washington, DC, 1979.

HARRINGTON, LARRY W.

Farrier, D.S.; Harrington, L.W.; Poulson, R.E. "Integrated Compliance and Control Technology Research Activities for In Situ Fossil Fuel Processing Experiments". Department of Energy, Laramie Energy Technology Center.

HASSELL, WENDELL

Hassell, W. "Evaluation of Plant Species in Seeding Mulch Methods". Department of Transportation Test Track, Pueblo, CO, August 1978.

Hassell, W. "Evaluation of Plant Species and Seeding Methods for Use on Depleted Rangelands and Shallow Soils at High Elevations". March 1979.

Hassell, W. "Summary of Seed Yields". Plant Materials Center, May 1979.

HATCH, FREDERICK T.

Hatch, F.T.; Timourian, H. "Application of a Battery of Short-Term Bioassays for Testing the Genetic Toxicity of Paraho Shale Oil Products", Proceedings, EPA/ORNL Synthetic Fuel Meeting, EPA, Research Triangle Park, NC, April 1979, in press.

HEITMAN, RONALD L.

Gilbert, R.; Harrison, C.C. "Impacts of Energy Development in the Uinta Basin". Uinta Basin Association of Governments, August 1979.

Heitman, R. "Uinta Basin Development Plan". Uinta Basin Association of Governments, October 1979.

Heitman, R. "Employment Projections for Energy Related Projects in the Uinta Basin". Uinta Basin Association of Governments, March 1979.

HENDRICKS, LLOYD J.

Hendricks, L.J.; Smith, J.W. "Lasar Pyrolysis Probe Mapping of the Organic Microstructure of Oil Shale".

HINES, ANTHONY L.

Hines, A.L.; Duvall, J.J. "Shale Oil Retention on Crushed Unretorted Shale". In Situ 1978, 2(2), 17.

Amy, G.L.; Thomas, J.F.; Hines, A.L. "Leaching of Organic Residuals from Simulated In Situ Retorted Oil Shale". ACS, Div. of Fuel Chem. 1978, 23(2), 125.

Hines, A.L. "The Role of Spent Shale in Oil Shale Processing and the Management of Environmental Residues". U.S. Department of Energy, Fossil Energy Technical Report TID-28586, April 1978.

Murphy, D.L.; Hines, A.L.; Poulson, R.E. "Hot Gas Stripping of Simulated In Situ Oil Shale Retort Water". ACS, Div. of Fuel Chem. 1978, 23(2), 193.

Pedram, E.; Hines, A. L. "Transport of H_2S Through Retorted Oil Shale". 71st Annual AIChE Meeting, Transport and Reactions in Soils and Porous Rocks Symposium, Miami, FL, November 1978.

Farrier, D.S.; Hines, A.L.; Wang, S.W. "Adsorption of Phenol and Benzoic Acid from Dilute Aqueous Solution onto a Macroreticular Resin". J. Colloid Interface Sci. 1979, 69(2), 233.

Wang, S.W.; Hines, A.L.; Farrier, D.S. "Adsorption of Aliphatic Acids from Aqueous Solutions onto Activated Carbon". J. Chem. Eng. Data 1979, 24(4).

Pedram, E.; Hasanain, M.A.; Hines, A.L.; Duvall, J.J. "Adsorption of Hydrogen Sulfide on Shale Retorted in an Inert Atmosphere". In Situ 1979, 3(4).

Hines, A.L., (Guest Editor,) "Symposium on Oil Shale Technology". Ener. Comm. 1979, 5(6).

HO, C.-h.

Ho, P.C.; Ho, C.; Krans, K.A. "Solubility of Toluene in Aqueous Sodium Alkylbenzenesulfonate Solutions". J. Chem. Eng. Data 1979, 24(2), 115.

Ho, C.; Clark, B.R.; Guerin, M.R.; Ma, C.Y.; Rao, T.K. "Aromatic Nitrogen Compounds in Fossil Fuel--A Potential Hazard?" ACS Div. Fuel Chemical Paper 1979, 24(1), 281-291.

Ho, C.; Guerin, M.R.; Clark, B.R.; Rao, T.K.; Epler, J.L. "Aromatic Amines and N-Heterocyclics Identified as Important Mutagens in Synthetic Crude Oils", submitted for publication in Nature.

Griest, W.H.; Guerin, M.R.; Clark, B.R.; Ho, C.; Rubin, I.B.; Jones, A.R. "Relative Chemical Composition of Selected Synthetic Crudes", presented at Symposium on Assessing the Industrial Hygiene Monitoring Needs for the Coal Conversion and Oil Shale Indistries, Brookhaven National Laboratory, Upton, NY, November 1978, proceedings in press.

Ho, C.; Ma, C.Y.; Clark, B.R.; Guerin, M.R.; Rao, T.K.; Epler, J.L. "Separation of Neutral Nitrogen Compounds from Synthetic Crude Oils for Biological Testing", submitted for publication in Environ. Res.

HODGSON, ALFRED T.

Girvin, D.C.; Hodgson, A.T.; Fox, J.P. "Distribution of As, Cd, Hg, Pb, Sb, and Se During Simulated In Situ Oil Shale Retorting," Quarterly Progress Report, October 1 to December 31, 1978, UCID-8106.

HOLLAND, J. MIKE

Holland, J.M.; Whitaker, M.S.; Wesley, J.W. "Carcinogenicity of Syncrudes Relative to Natural Petroleum as Assessed by Repetitive Mouse Skin Application", presented at Symposium on Potential Health and Environmental Effects of Synthetic Fossil Fuel Technologies, September 1978, ORNL Conference Report No. 780903.

Holland, J.M.; Perkins, E.H. "Resistance of Germfree Athymic Nude Mice to Two-Stage Skin Carcinogenesis", presented at The 3rd International Workshop on Nude Mice, Bozeman, MT, September 1979.

Holland, J.M.; Whitaker, M.S.; Wesley, J.W. "Correlation of Fluorescence Intensity and Carcinogenic Potency of Synthetic and Natural Petroleums in Mouse Skin". Am. Ind. Hyg. Assoc. J. June 1979, 40.

Holland, J.M. et al. "Skin Carcinogenicity of Synthetic and Natural Petroleums". J. Occ. Med. 1979, 21(9), 614-618.

Holland, J.M.; Whitaker, M.J.; Gipson, L.C. "Chemical and Biological Factors Influencing the Skin Carcinogenicity of Fossil Liquids", presented at the Park City Environmental Health Conference, Park City, UT, April 1979.

Holland, J.M. et al. "Assessment of the Carcinogenic Risk from Energy Related Organics", presented at the Fourth National Conference Interagency Energy/Environment R&D Program, Sponsored by EPA's Office of Energy, Minerals & Industry, Washington, DC, June 1979.

Legraverend, C.; Mansour, B.; Nebert, D.W.; Holland, J.M. "Genetic Differences in Benzo(a)Pyrene-Initiated Tumorigenesis in Mouse Skin". J. Pharmacol., in press.

Rahn, R.O.; Chang, S.S.; Holland, J.M.; Stephens, T.J.; Smith, L.H. "Binding of Benzo(a)Pyrene to Epidermal DNA and RNA as Detected by Synchronous Luminescence Spectrometry at 77°K". submitted for publication to J. Biochem. Biophys. Methods.

Wilson, J.S.; Holland, L.M. "Acute Toxic Effects of Two Crude Shale Oils and Two Standard Petroleum Crude Oils Applied to Mouse Skin". Los Alamos Scientific Laboratory, Report LA-7967-MS, August 1979.

Holland, L.M.; Smith, D.M.; Thomas, R.G. "Biological Effects of Raw and Processed Oil Shale Particles in the Lungs of Laboratory Animals". Environ. Health Perspect. 1979, 30, 147-152.

Holland, L.M.; Spall, W.D.; Garcia, L.L. "Inhalation Toxicology of Oil Shale Related Materials", proceedings of the Conference on Health Implications of New Energy Technologies, Park City, UT, April 1979.

HOLMES, WALTER F.

Holmes, W.F. "Maps Showing Generalized Structure Contours on the Tops of the Wasatch and Green River Formation, Geologic Sections, and Contours of Thickness of the Green River Formation, Southeastern Uinta Basin, Utah and Colorado". Miscellaneous Investigation Series Map I-1156, 1979, published by USGS.

HORINO, FRANK G.

Dolinar, D.; Horino, F.G.; Hooker, V. "Mechanical Properties of Oil Shale and Overlying Strata; Naval Oil Shale Reserve, Anvil Points, Colorado". Progress Report USBM 10024.

Horino, F.; Dolinar, D.; Bickel, D. "Rock Mechanics Investigations on the Logan Wash Oil Shale Experimental Mine, Garfield County, Colorado". Draft.

HUNT, VERL F. ("BUZ")

Hunt, V.F. "An Assessment of Oil Shale and Tar Sand Development in Utah". Utah Energy Office, in press, 1980.

HURTUBISE, ROBERT J.

Hurtubise, R.J.; Skar, G.T. "Separation, Identification and Determination of Polycyclic Aromatic Hydrocarbons in Shale Oil", presented at the National ACS Meeting, Anaheim, CA, March 1978.

Hurtubise, R.J.; Skar, G.T; Poulson, R.E. "Determination of Benzo(a)Pyrene in Shale Oil by Solid-Surface Fluorescence". Anal. Chim. Acta 1978, 97, 13-19.

Hurtubise, R.J.; Phillip, J.D.; Skar, G.T. "Determination of Benzo(a)Pyrene in a Filtered Retort Water Sample by Solid-Surface Fluorescence". Anal. Chim. Acta 1978, 101, 333-338.

Hurtubise, R.J.; Phillip, J.D. "Characterization of Polycyclic Aromatic Hydrocarbons in Shale Oil by Chromatography and Fluorescence Densitometry". Anal. Chim. Acta 1979, 110, 245-254.

HYDE, ROBERT

Hyde, R. "Cattle Guard". Colorado Cattlemen's Association Magazine, Range Wildlife Almanac, monthly.

JACKSON, DANIEL

Fox, J.P.; Anaclerio, R.; Jackson, D.E.; Lubic, S. "Spent Shale as a Control Technology for Oil Shale Retort Water". Quarterly Progress Report, June 1 to September 30, 1978, UCID-8111.

Jackson, D.E.; Fox, J.P. "Spent Shale as a Control Technology for Oil Shale Retort Water". Quarterly Progress Report, October 1 to December 1, 1978, UCID-6109.

JACOBS, HAROLD R.

Udell, K.S.; Jacobs, H.R. "Heat Transfer to Oil Shale in a Closely Spaced Burden as an Approximation to Pack Bed". Winter Annual Meeting ASME, Paper No. 79-WA/HT-34, 1979.

Udell, K.S.; Jacobs, J.R. "Heat Transfer in a Bottom Burning Oil Shale Retort". ASME, Paper No. 79-HT-3, 1979.

Udell, K.S.; Dituri, V.J.; Jacobs, H.R. "Experimental Performance of a Bottom Burning Oil Shale Retort Using Nitrogen and Steam Dilution", presented at Rocky Mountain Fuel Symposium, August 1978.

JATEN, CHARLES E.

Jaten, C.E. "Federal Assistance for Energy Impacted Groundwaters". Prepared by Mountain Plains, 1979.

JOHNSON, DONALD R.

Johnson, D.R. "Stratigraphic Variation of Oil Shale Enthalpy of Retorting Through the Green River Formation on the Colorado C-2 Tract". to be published as a DOE RI.

JOHNSON, JOHN W.

Demos, R.; Johnson, J.W. "1979 & 1980 Oil Shale Trust Fund Request". Colorado West Area Council of Governments.

JOHNSON, RONALD C.

Johnson, R.C. "Supplementary Cross Sections and Structure Contour Maps to the Preliminary Geologic Map of the Figure Four Spring Quadrangle, Rio Blanco and Garfield Counties, Colorado". U.S. Geol. Survey Open-File Rept. D78-81 (9 sheets), 1978.

Pitman, J.K.; Johnson, R.C. "Isopach, Structure Contour and Resource Maps of the Mahogany Oil-shale Zone, Green River Formation, Piceance Creek Basin, Colorado". U.S. Geological Survey Miscellaneous Field Investigations Map MF-958, 1978.

Johnson, R.C. "Cross Section Showing Depositional Environments and Lithologies of Some Upper Cretaceous and Tertiary Rocks, from DeBeque to the North-central Piceance Creek Basin, Colorado". U.S. Geological Survey Open-file Report 78-182, 1 sheet, 1978.

Johnson, R.C. "Cross Section A-A' of Upper Cretaceous and Lower Tertiary Rocks, Northern Piceance Creek Basin, Colorado". U.S. Geological Survey Miscellaneous Field Investigations Map MF-1129-A, 2 sheets, 1979.

Johnson, R.C. "Preliminary Stratigraphic Studies of the Upper Part of the Mesaverde Group, the Wasatch Formation and the Lower Part of the Green River Formation, Debeque Area, Colorado, Including Environments of Deposition and Investigation of Palynomorph Assemblages". U.S. Geological Survey Miscellaneous Field Investigations Map MF-1050, 2 sheets, 1979.

Johnson, R.C. "Cross Section B-B' of Upper Cretaceous and Lower Tertiary Rocks, Northern Piceance Creek Basin, Colorado". U.S. Geological Survey Miscellaneous Field Investigations Map MF-1129-B, 2 sheets, 1979.

Johnson, R.C. "Cross Section C-C' of Upper Cretaceous and Lower Tertiary Rocks, Northern Piceance Creek Basin, Colorado". U.S. Geological Survey Miscellaneous Field Investigations Map MF-1129-C, 2 sheets, 1979.

Johnson, R.C.; Granica, M.P.; Dessenberger, N.C. "Cross Section A-A' of Upper Cretaceous and Lower Tertiary Rocks, Southern Piceance Creek Basin, Colorado". U.S. Geological Survey Miscellaneous Field Investigations Map MF-1130-A, 2 sheets, 1979.

Johnson, R.C.; Granica, M.P.; Dessenberger, N.C. "Cross Section B-B' of Upper Cretaceous and Lower Tertiary Rocks, Southern Piceance Creek Basin, Colorado". U.S. Geological Survey Miscellaneous Field Investigations Map MF-1130-B, 2 sheets, 1979.

Johnson, R.C.; Granica, M.P.; Dessenberger, N.C. "Cross Section C-C' of Upper Cretaceous and Lower Tertiary Rocks, Southern Piceance Creek Basin, Colorado". U.S. Geological Survey Miscellaneous Field Investigations Map MF-1130-C, 2 sheets, 1979.

Johnson, R.C.; Douglas, B.J. "Preliminary Geologic Map of the Wagon Track Ridge Quadrangle, Garfield and Mesa Counties, Colorado". U.S. Geological Survey Miscellaneous Field Investigations Map MF, 1980, in press.

JOVANOVICH, ANDY J.

Nevens, T.D.; Culbertson, W.J.; Wallace, J.R.; Taylor, G.C.; Jovanovich, A.P.; Prien, C.H.; Hicks, R.E.; Probstein, R.F. "Predicted Costs of Environmental Controls for a Commercial Oil Shale Industry", Vol. I: "An Engineering Analysis". In "Environmental Control Costs for Oil Shale Processes". U.S. Department of Energy Assistant Secretary for Environment, Office of Technology Impacts, DOE Report No. DOE/EV-0055, Washington, DC, October 1979.

KEALY, DAN

Kealy, D. "Groundwater in the Piceance Creek Basin" USBM Spokane Research Center, NTIS, 1978.

Kealy, D. "State-of-the-Art of Physical Properties of Oil Shale and Wastes", presented at ITRI Research Conference in Chicago, IL, May 1980.

KIMBALL, BRIANT

Kimball, B. "Geo-Chemistry of Spring Water, Southeastern Uinta Basin, Utah and Colorado". USGS Water Supply, publisher, in review.

KING, JEANNETTE W.

Schmidt-Collerus, J.J.; Couse, N.; King, J.W.; Leffler, F.L. "Development of Enzymatic Prescreening Test for Mutagens/Carcinogens". EPA Final Report, April 1979.

King, J.W.; Peiser, H.S.; Sangster, R.C. "Guidelines for Specification and Procurement of Measurement Instrumentation". NBS Office of International Relations Publication 78-891, 1978.

Schmeling, W.A.; King, J.W.; Schmidt-Collerus, J.J. "Spontaneous Combustion Liability of Subbituminous Coals: Development of a Simplified Test Method for Field Lab/Mine Applications". Anal. Chem. Liquid Fuel Sources 1978, 1-12.

Couse, N.L.; Schmidt-Collerus, J.J.; King, J.; Leffler, F.L. "Biphenyl Hydroxylase Activity and the Detection of Carcinogens" presented at Symposium on Carcinogenic Polynuclear Aromatic Hydrocarbons in the Marine Environment, Pensacola Beach, FL, August 1978.

Couse, N.L.; King, J.W. "Use of the Spiral Plater with the Salmonella Test for Chemical Mutagens", presented at Environmental Mutagen Society Meeting, Nashville, TN, March 1980.

KINNEY, WESLEY L.

Kinney, W.L. "Long Term Effects of the Oil Shale Industry on Surface Water Resources of the Colorado River Basin". In Bates, E.R.; Thoem, T.L., Eds., "Environmental Perspective on the Emerging Oil Shale Industry". USEPA, Oil Shale Work Group. IERL-Ci, Cincinnati, OH, in press.

McMillion, L.; Kinney. W.L. "Monitoring Methodology for Surface and Groundwaters". In Bates, E.R.; Thoem, T.L., Eds. "Environmental Perspective on the Emerging Oil Shale Industry". USEPA, Oil Shale Work Group. IERL-Ci, Cincinnati, OH, in press.

Kinney, W.L.; Pollard, J.E.; Hornig, C.E.; Scarburgh, L.W.; Lowry, H.M.; Brecheisen, A.N. "Assessment of Nonpoint-Source Monitoring Procedures: Assessment of Techniques Tested in the White River, Utah Oil Shale Area". USEPA, Environmental Monitoring and Support Laboratory, Las Vegas, NV, in press.

Kinney, W.L.; Brecheisen, A.N.; Lambou, V.W. "Surface Water Quality Parameters for Monitoring Oil Shale Development". EPA-600/4-79-018. Environmental Monitoring and Support Laboratory, Las Vegas, NV, 1979, 141 pp.

Kinney, W.L.; Hornig, C.E.; Pollard, J.E. "Biological Monitoring Methodologies for Oil Shale Area Surface Waters with Emphasis on Macroinvertebrate Sampling Techniques". Proceeding of the EPA Oil Shale Sampling, Analysis and Quality Assurance Symposium, March 1979, Denver, CO, 1980, in press.

Melancon, S.M.S.; Kinney, W.L. "An Inventory of Macrobenthic Communities in the White River, Utah and Colorado", presented at Winter Meetings of American Society of Limnology and Oceanography, Corpus Christi, TX, January 1979.

Pollard, J.E.; Kinney, W.L. "Assessment of Macroinvertebrate Monitoring Techniques in an Energy Development Area: A Test of the Efficiency of Three Macroinvertebrate Sampling Methods in the White River". EPA-600/7-79-163. Environmental Monitoring and Support Laboratory, Las Vegas, NV, 1979, 26 pp.

KLAND, MATHILDE J.

Kland, M.J. "Structural-Analytical Techniques for Coping with the Logistics of TSCA", presented at ACS 33rd N.W. Regional Meeting, Seattle Pacific University, Seattle, WA, June 1978, LBL-7844.

Kland, M.J. "The Toxic Substances Central Act: A Chemist's View", presented at AAAS Symposium on Environmental Policy, Pacific Division 59th Annual Meeting, University of Washington, Seattle, WA, June 1978, LBL-7845.

Kland, M.J. "Prediction of Environmental and Health Effects of Chemicals", presented at AAAS Pacific Division, Section G (Biological), Seattle, WA, June 1978, LBL-7846.

Kland, M.J. "Chemical Structure and Toxicity: Multifactorial Predictive Techniques". Lawrence Berkeley Laboratory, Energy & Environmental Division Annual Report, 1978.

Kland, M.J.; Fox, J.P. "Potential Toxicants from In Situ Oil Shale Retorting". Lawrence Berkeley Laboratory, Energy & Environment Division Annual Report, 1978.

Kland, M.J. "Chemical Structure/Carcinogenesis". Lawrence Berkeley Laboratory, Energy & Environmental Division Final Progress Report, 1977-78.

Kland, M.J. "A Priori Predictive Methods of Assessing Health Effects of Chemicals in the Environment". In "Water Chlorination: Environmental Impact and Health Effects", Vol. 2, Chapter 34. Eds. Jolley, R.L.; Gorcher H.; Hamilton, Jr., D,H,; Ann Arbor Sci. Pub.: Ann Arbor, MI, 1978.

Kland, M.J. "Chemical Carcinogens and PL 94-469 (TSCA)", presented at Environmental Law Forum, 3rd Annual Conference; Policies Toward Environmental Quality: Old Problems and New Needs, McGeorge School of Law, Sacramento, CA, March 1979.

KLUSMAN, RONALD W.

Candito, R.J.; Klusman, R.W. "Geochemical Baseline Study of Surficial Materials in the Vicinity of Oil Shale Tract C-a, Rio Blanco County, Colorado". In Situ, in press.

Klusman, R.W.; Candito, R.J.; Zuccaro, B. "Trace Element Baseline Studies in the Colorado Portion of the Oil Shale Region", Proceedings of Geological Society of America, Rocky Mountain Section; Abs., 1979, p. 276.

Dean, W.E.; Ringrose, C.D.; Klusman, R.W. "R-mode and Q-mode Factor Analyses of Soil Chemistry, Piceance Creek Basin, Colorado". U.S. Geol. Survey, Open-file Report, 77-872, 1977, 77-90.

Dean, W.E.; Ringrose, C.D.; Klusman, R.W. "Geochemical Variation in Soils in the Piceance Creek Basin, Western Colorado". U.S. Geol. Survey, Bull. 1479, 1979, 47 pp.

Klusman, R.W.; Ringrose, C.D.; Candito, R.J.; Zuccaro, B. "Sampling Design for Baseline Studies of the Colorado Oil Shale Region", Proceedings of the EPA Oil Shale Symposium on Sampling, Analysis, and Quality Assurance; University of Denver, Denver, CO, 1980, in press.

Klusman, R.W.; Ringrose, C.D.; Candito, R.J.; Zuccaro, B.; Rutherford, D.B.; Dean, W.E. "Sampling Designs for Geochemical Baseline Studies in the Colorado Oil Shale Region: A Manual for Practical Application". In review.

KRUG, EUGENE P.

Krug, E.P. "Environmental Analysis of Synthetic Liquid Fuels". U.S. Department of Energy, July 1979.

LADWIG, LEWIS R.

Kirkham, R.M.; Ladwig, L.R. "Co-resources of the Denver and Cheyenne Basins, Colorado". Resource Series No. 5, Colorado Geological Survey, Denver, CO, 1979.

Kirkham, R.M.; Ladwig, L.R. "Energy Resources of Denver and Cheyenne Basins, Colorado-Resource Characteristics, Developmental Potential, and Environmental Problems". Environmental Geology No. 12, Colorado Geological Survey, Denver, CO, in manuscript.

LAMSON, KENNETH C.

Lamson, K.C. "Air Quality Measurements in Oil Shale Retorting". University of California Research Laboratories Report CRL#52683, February 1979.

LAWLOR, DALE L.

Lawlor, D.L.; Latham, D.R.; Bartke, T.C.; Asplund, R.O. "The Use of Optical Activity Measurements in Oil Shale Processing", proceedings of ACS Symposium on New Analytical Methods Applied to Fuels and Fuel Processing, Anaheim, CA, March 1978, Preprint, Division of Fuel Chemistry, Vol. 23, No. 2.

Lawlor, D.L.; Latham, D.R.; Fausett, D.W.; Asplund, R.O. "Post/Burn Study of the Rock Springs Site 9 In Situ Retorting Experiment", Proceedings of 12th Annual Oil Shale Symposium, Colorado School of Mines, Golden, CO, April 1979.

Lawlor, D.L.; Latham, D.R.; Asplund, R.O. "Optical Activity of Shale Oil", presented at Pittsburgh Conference in Analytical Chemistry and Applied Spectroscopy, 1978.

Asplund, R.O.; Lawlor, D.L. "Optical Activity Parameters of Chiral Alkanes from Oil Shale", presented at Pittsburgh Conference in Analytical Chemistry and Applied Spectroscopy, 1978.

Asplund, R.O.; Lawlor, D.L. "Methodology Problems in the Measurement of the Optical Activity of Shale Oil", presented at Rocky Mountain Conference on Analytical Chemistry, Denver, CO, August 1978.

LEENHEER, JERRY A.

Stuber, H.A.; Leenheer, J.A. "Assessment of a Resin-Based Fractionation Procedure for Monitoring Organic Solutes from Oil Shale Retorting Wastes". presented at American Water Resources Association Symposium: Establishment of Water Quality Monitoring Programs, San Francisco, CA, June 1978.

Leenheer, J.A.; Farrier, D.C. "Applications of Dissolved Organic Carbon Fractionation Anlysis to the Characterization of Oil Shale Processing Waters", presented at EPA Oil Shale Sampling, Analysis and Quality Assurance Symposium, Denver, CO, March 1979.

Leenheer, J.A. "Study of Sorption of Complex Organic Solute Mixtures on Seidment by Dissolved-Organic-Carbon Fractionation Analysis". National Meeting, American Chemical Society Symposium on Contaminants and Sediments, Honolulu, HI, April 1979; Ann Arbor Serv.: Ann Arbor, in press.

LEWIS, ARTHUR E.

Lewis, A.E. "Oil from Shale: The Potential, The Problems, and a Plan for Development". Energy 1980, in press; and Lawrence Livermore Laboratory Report UCRL #83236, August 1979.

LILLIAN, DANIEL

Study Group Report. "Industrial Hygiene Monitoring Needs for the Coal Conversion and Oil Shale Industries". DOE/EV 0058, Assistant Secretary for Environment, February 1979.

LINHART, YAN

Linhart, Y.; Bock, J.H. "Ecological and Genetic Effects of Spent Oil Shale in Colorado Plant Communities". Report for the Colorado Energy Research Institute, 1978.

LITTLE, WILLIAM E.

Sands, P.; Little, W.E. et al. "Blind Shaft Bore: Technology Status Report", presented at AIME Conference, New Orleans, LA, February 1979.

LORENSON, BURMAN

Lorenson, B.; Hilliard, M.J.; Buys, K.; Garrett, P.; Hammer, M.. "Federal Assistance for Energy Impacted Communities". Mountain Plains Federal Regional Council. Hickey, D., Ed.; Denver, CO, 1979.

Lorenson, B.; Bolt, R.M.; Fernandez, J.M. "Colorado Energy Impact Assistance Plan". Governor's Socioeconomic Impact Office, Denver, CO, 1978.

MALDE, HAROLD E.

Malde, H. E. "Surface Mining of Non-Coal Minerals". Including "Appendix B-Oil Shale and Tar Sands". Working paper of the Panel on Oil Shale and Tar Sands, National Academy of Sciences, 1979.

MALLON, RICHARD G.

Mallon, R.G. "Effect of Oil Wetting on Pressure Difference in Experimental Oil Shale Retorts". *Fuel* 1979, 58, 765-768.

Mallon, R.G. "Preparation and Injection of Grout from Spent Shale for Stabilization of Abandoned In Situ Oil Shale Retorts", presented at Society of Petroleum Engineers, Las Vegas, NV, September 1979, SPE #8448, and submitted for publication in *J. Petroleum Technol.*

MARTEL, RICHARD

Martel, R.; Duvall, J.J. "Comparison of Simulate In Situ Retorting Results for Michigan Basin Antrium and Colorado Green River Formation Oil Shale", presented at 71st AIChE National Meeting, November 1978.

MARTIN, JOAN

Martin, J. "A Methodology for Analyzing Attitudes Towards Oil Shale Development in Colorado", for Booz-Allen & Hamilton. Colorado Energy Research Institute, Golden, CO, 1979.

MAZZA, CARL

EPA Working Group. "Pollution Control Guidance Document". Draft due September 1980.

McCARTHY, JR., WILLIAM N.

McCarthy, Jr., W.N., Ed. "EPA Program Status Report: Oil Shale 1979 Update". Prepared by the EPA Oil Shale Research Group and the Denver Research Institute, EPA-600/7-79-089, June 1979.

McCarthy, Jr., W.N., Ed. "EPA Program Conference Report: Oil Shale", Proceedings of the EPA/Industry Forum, January 1979. Prepared by EPA Office of Energy, Minerals and Industry and the C.K. GeoEnergy Corporation, EPA-600/9-79-025, July 1979.

McCLENDON, LOTTIE T.

McClendon, L.T. "A Summary of Oil Shale Activities at the National Bureau of Standards: 1975-1979". EPA Environmental Energy Report, 1980, in preparation.

McGINNIES, WILLIAM J.

McGinnies, W.J.; Ludwig, J.R. "Effects of Natrustoll Soil Horizons on Germination, Emergence, and Growth of Four Grasses". *Agron. J.* 1978, 7, 1086-1088.

McGinnies, W.J. "The Use of Sod as a Method for Establishing Blue Grama", Abstract. Annual Meeting of the Society of Range Management, Casper, WY, 1979.

McKELL, CYRUS M.

McKell, C.M. "Establishment of Native Plants for the Rehabilitation of Paraho Processed Oil Shale in an Arid Environment". In "The Reclamation of Disturbed Arid Lands", Wright, R.A., Ed.; New Mexico Press, 1978, pp. 13-32.

Alvarez-Cordero, E.; McKell, C.M. "Vegetation Propagation of Big Sagebrush (*Artemisia tridentata*)". *J. Range Manage.* 1979, 32.

Richardson, S.G.; McKell, C.M. "Response of *Atriplex canescens* to Potassium Fertilization, Soil Moisture and Salinity of Processed Oil Shale", Proceedings of the Society for Range Management Meeting, Casper, WY, February 1979.

Van Epps, G.A.; McKell, C.M. "Major Criteria and Procedures for Selecting and Establishing Range Shrubs as Rehabilitations of Disturbed Lands", Proceedings of First International Rangeland Congress, 1979, pp. 352-354.

Institute for Land Rehabilitation. 1979. Rehabilitation of disturbed sites and oil shale disposal sites. Final Report to White River Shale Project. Utah State University.

Institute for Land Rehabilitation. "Selection, Propagation and Field Establishment of Native Plant Species on Disturbed Arid Lands". Utah Agric. Expt. Stn. Bulletin 500. 1979, 49 pp.

Barker, J.R.; McKell, C.M. "Growth of Seedlings and Stem Cuttings of Two Salt Desert Shrubs in Containers Prior to Field Planting". *Recl. Rev.* 1979, 2, 85-89.

McKell, C.M.; Van Epps, G. "Vegetative Rehabilitation of Arid Land Disturbed in the Development of Oil Shale and Coal". 1979, EPA Interagency Energy/Environment R&D program report.

McMILLION, LESLIE G.

McMillion, L.G. "Groundwater Quality Monitoring of Oil Shale". EPA 1980 Research Highlights (in preparation).

McMillion, L.G. (Project Officer) "Compendium Reports on Oil Shale Technology". EPA-600/7-79-039, June 1979.

McMillion, L.G. (Project Officer) "Groundwater Quality Monitoring of Western Oil Shale Development: Identification and Priority Ranking of Potential Pollution Sources". EPA-600/7-79-023, January 1979.

McMillion, L.G. "Groundwater Quality Monitoring of Western Oil Shale Development: Monitoring Program Development". (EPA Report in Preparation).

McMillion, L.G. "Monitoring Groundwater Quality: The Impact of In Situ Oil Shale Retorting", Draft Report, 1980, in press.

McWHORTER, DAVID B.

Harbert; Berg, W.; McWhorter, D. "Vegatative Stabilization of Spent Oil Shale". EPA Report, Cincinnati, OH, 1979.

MILLAR, ROD

Millar, R. "An Assessment of Oil Shale and Tar Sands Development in Utah". Utah Energy Office, Spring 1980, in press.

MILLER, GLEN A.

Miller, G.A. "Synthetic Fuels and Atmospheric Carbon Dioxide". submitted for publication in Science.

MONTI, DARIO

Monti, D. "Environmental Development Plan for Oil Shale". Oil Shale EDP ECC Subcommittee, DOE/EDP-0051, U.S. Department of Energy, Washington, DC, 1979.

Monti, D. "Environmental Readiness Document: Oil Shale". DOE/ERD-0016, U.S. Department of Energy, Washington, DC, 1978.

MORSE, JEROME G.

Morse, J.G. "Energy Resources in Colorado: Coal, Oil Shale, and Uranium". Westview Press: Boulder, CO, 1979.

MUELLER, LEONARD H.

Marcus, M.D.; Bergman, H.L.; Stoller, D.A.; Brown, S.D.; Molholt, P.A. "Bibliography of Aquatic Ecosystem Effects, Analytical Methods and Treatment Technologies for Organic Compounds in Advanced Fossil Fuel Processing Effluents".

MURRAY, THOMAS M.

Henderson, C.; Murray, T.M. Two reports on Daggett, Duchesne and Uinta Counties on Grant No. DCA/DCED/0020/80-3-96, Vernal, UT.

NATUSCH, DAVID F.S.

Natusch, D.F.S.; Slatt, B.J. "Hydrogen Sulfide as an Air Pollutant". In "Air Pollution Control", Part III; Strauss, W., Ed.; Wiley Interscience, John Wiley & Sons: New York, 1978, 271-316.

Natusch, D.F.S.; Bauer, C.F.; Loh, A. "Collection and Analysis of Trace Elements in the Atmosphere". In "Air Pollution Control", Part III, Strauss, W., Ed.; Wiley Interscience, John Wiley & Sons: New York, 1978, 217-316.

Natusch, D.F.S. "Potentially Carcinogenic Species Emitted from Fossil Fueled Power Plants". Environ. Health Perspect. 1978, 22, 7990.

Slatt, B.J.; Natusch, D.F.S.; Savoie, D.L.; Prospero, J.M. "Hydrogen Sulfide in the Atmosphere of the Northern Equatorial Atlantic Ocean". Atmos. Environ. 1978, 12, 981-991.

Natusch, D.F.S.; Tomkins, B.A. "Theoretical Consideration of the Adsorption of PAH Vapor onto Fly Ash in a Coal Fired Power Plant". "Carcinogenesis-A Comprehensive Survey", Jones P.W.; Freudenthal, R.I, Eds., 1978, Vol. 3, 145-153.

Chuang, F.S.; Natusch, D.F.S.; O'Keefe, K.R. "Evaluation of a Self-scanned Photodiode Array Spectrometer for Flame Atomic Absorption Measurements". Anal. Chem. 1978, 50, 525-530.

Natusch, D.F.S.; Tomkins, B.A. "Isolation of Polycyclic Organic Compounds by Solvent Extraction with Dimethylsulfoxide". Anal. Chem. 1978, 50(1), 1429-1434.

Hopke, P.K.; Lamb, R.E.; Natusch, D.F.S. "Multielemental Characterization of Urban Roadway Dust". Environ. Sci. Technol., in press.

Linton, R.W.; Natusch, D.F.S.; Solomon, R.L.; Evans, Jr., C.A. "Physico-chemical Characterization of Lead in Urban Dusts: A Microanalytical Approach for Lead Tracing". Environ. Sci. Technol., in press.

Keyser, T.R.: Natusch, D.F.S.; Evans, Jr., C.A.; Linton, R.W. "Characterizing the Surfaces of Environmental Particles". Environ. Sci. Technol. 1978, 12(7), 768-773.

Ratzlaff, K.L.; Chuang, F.S.; Natusch, D.F.S.; O'Keefe, K.R. "Computer Controlled Dual Wavelength Spectrometer". Anal. Chem. 1978, 50, 1799-1803.

Natusch, D.F.S. "Characterization of Fly Ash from Coal Combustion", Proceedings of Workshop on Emissions from Combustion Sources, Southern Pines, NC: 1978 EPA Report #600/9-78-020b, Vol. II, 149-164.

Natusch, D.F.S.; Korfmacher, W.A.; Miguel, A.H.; Schure, M.R.; Tomkins, B.A. "Transformation of POM in Power Plant Emissions", Proceedings of Symposium on Process Measurements for Environmental Assessment; Atlanta, GA, February 1978; EPA Report #600/7-78-168, 183-191.

Skogerboe, R.K.; Natusch, D.F.S.; Taylor, D.R.; Dick, D.L. "Potential Toxic Effects on Aquatic Biota from Oil Shale Development", Proceedings of Eleventh Oil Shale Symposium, Colorado School of Mines, Golden, CO, April 1978, pp. 43-46.

Korfmacher, W.A.; Natusch, D.F.S.; Taylor, D.R.; Whery, E.L.; Mamantov, G. "Thermal and Photochemical Decomposition of Particulate PAH". In "Polynuclear Aromatic Hydrocarbons", Jones, P.W.; Leber, P., Eds.; Ann Arbor Science Publishers: Ann Arbor, MI, 1979, 165-170.

Korfmacher, W.A.; Natusch, D.F.S.; Taylor, D.R.; Mamantov, G.; Wehry, E.L. "Oxidative Transformations of Polycyclic Aromatic Hydrocarbons Adsorbed on Coal Fly Ash". Science, in press.

Ratzlaff, K.L.; Natusch, D.F.S. "Theoretical Assessment of Accuracy in Dual Wavelength Spectrophotometric Measurement". Anal. Chem. 1979, 51, 1209-1217.

Fisher, G.L.; Natusch, D.F.S. "Size Dependence of Physical and Chemical Properties of Fly Ash". In "Analytical Methods for Coal and Coal Products", Vol. 3. Karr, Jr., C., Ed.; Academic Press, in press.

Korfmacher, W.A.; Miguel, A.H.; Mamantov, G.; Wehry, E.L.; Natusch, D.F.S. "Apparatus for Vapor-phase Adsorption of Polycyclic Organic Matter onto Particulate Surfaces". Environ. Sci. Technol. 1979, 13, 1229-1232.

Miller, J.A.; Natusch, D.F.S.; Schmidt, J.F. "Simultaneous Determination of Inorganic and Organic Mercury Utilizing Sodium Borohydride, Photodecomposition and Cold Vapor Atomic Absorption". Anal. Chem., in press.

Taylor, D.R.; Tompkins, M.A.; Kirton, S.E.; Mauney, T.; Natusch, D.F.S.; Hopke, P.K.; Kleinhenz, N. "Analysis of Fly Ash Produced From Combustion of Refuse Derived Fuel and Coal Mixtures". Environ. Sci. Technol., in press.

Chudd, J.M.; Bauer, C.F.; Natusch, D.F.S.; Frazier, R.; Hutton, R.; Miller, J.A.; Coblenz, J.G.; Sweitzer, T. "Validity of Atmospheric Sulfur Dioxide Monitoring Methodology", submitted for publication in Anal. Chem.

Natusch, D.F.S. "Toxic Potential of Sulfate in Coal Fly Ash", Proceedings of International Symposium of Sulfur Emissions and the Environment, London, May 1979, 185.

Miguel, A.H.; Schure, M.F.; Natusch, D.F.S. "Adsorption of Vapor Phase Polycyclic Organic Matter onto Fly Ash", submitted for publication in Environ. Sci. Technol.

Bauer, C.F.; Natusch, D.F.S. "Identification and Quantitation of Individual Carbonate Compounds in Coal Fly Ash". Environ. Sci. Technol., in press.

Johansson, A.; Lundberg, M.; Hellstrom, P.; Camner, P.; Keyser, T.R.; Kirton, S.E.; Natusch, D.F.S. "Effect of Iron, Cobalt, and Chromium Dust on Rabbit Alveolar Macrophages: A Comparison with the Effects of Nickel Dust". Environ. Health, in press.

Natusch, D.F.S. "Recent Advances in Surface Analysis of Environmental Particles", Proceedings of the International Congress on Analytical Techniques in Environmental Chemistry, Barcelona, Spain, November 1978, in press.

Tucker, W.B.; Li, K.P.; Natusch, D.F.S. "Quantitative Determination of the Configurations of Paramagnetic Metal Complexes", submitted for publication in J. Amer. Chem. Soc.

Matusiewixz, H.; Natusch, D.F.S. "Simultaneous Multielement Analysis of Coal Fly Ash Leachates by D. C. Plasma-Echelle Spectrometry and Ion Chromatography", submitted for publication in Chem. Anal.

Natusch, D.F.S.; Denoyer, E.F.; Keyser, T.R.; Kirton, S.E.; Taylor, D.R. "Surface Analysis of Particles Emitted to the Atmos phere", Proceedings of AIChE Symposium on Sampling and Analysis of Particulate Matter, in press.

Natusch, D.F.S.; Thorpe, T.M.; Tompkins, M.A. "Speciation of Mercuric Chloride and Methylmercuric Chloride by Solvent Extraction and Gas-Liquid Chromatography: A Critical Evaluation", submitted for publication in Anal. Chim. Acta.

Natusch, D.F.S.; Stine, B.A.; Brumleve, T.R.; Sonnichsen, W.J. "Determination of Soluble Phosphate in Aerosols by Derivitivization Gas Chromatography", submitted for publication in Anal. Chem.

Hughes, M.M.; Natusch, D.F.S.; Taylor, D.R. "Chemical Transformations of Particulate Polycyclic Organic Matter", Proceedings of 4th International Symposium on PAH, October 1979, Columbus, OH, in press.

Natusch, D.F.S. "Environmental Analysis," Encyclopedia of Environmental Science". McGraw Hill, in press.

Korfmacher, W.A.; Wehry, E.L.; Mamantov, G.; Natusch, D.F.S. "Resistance to Photochemical Decomposition of Polycyclic Aromatic Hydrocarbons Vapor-Adsorbed on Coal Fly Ash". Environ. Sci. Technol., in press.

Natusch, D.F.S. "Chemical Properties of Aerosols Affecting Inhalation Toxicology", Proceedings of 19th Hanford Life Sciences Symposium on Pulmonary Toxicology of Respirable Particles, in press.

NEVENS, THOMAS

Culbertson, W.J.; Habenicht, C.; Nevens, T. "Spent Oil Shale Ash Slurry for Grouting Retorted Rubble of In Situ Retorts". June 1979

Nevens, T.D.; Culbertson, W.J.; Wallace, J.R.; Taylor, G.C.; Jovanovich, A.P.; Prien, C.H.; Hicks, R.E.; Probstein, R.F. "Predicted Costs of Environmental Controls for a Commercial Oil Shale Industry", Vol. I: "An Engineering Analysis". In "Environmental Control Costs for Oil Shale Processes". U.S. Department of Energy Assistant Secretary for Environment, Office of Technology Impacts, DOE Report No. DOE/EV-0055, Washington, DC, October 1979.

NEWPORT, ROBERT D.

Newport, R.D. "Predictions of Ground-water Quality by Mineralogical Examinations--In Situ Oil Shale Retorting". Final Report, December 1979.

Newport, R.D. "Organic Solute Transport Study of Wastewater Produced by In Situ Oil Shale Retorting". Final Report, May 1979.

Newport, R.D. "Characterization and Persistence of Backflood Solutes from In Situ Oil Shale Retorting". Final Report, December 1979.

Newport, R.D. "Subsurface Water Sampling and Analysis of In Situ Oil Shale Wastewater". Final Report, December 1979.

Newport, R.D. "Predictions of Groundwater Quality by Mineralogical Examinations--In Situ Coal Gasification". April 1979.

Newport, R.D. "Overburden Mineralogy as Related to Predictions of Groundwater Quality--Coal Strip Mining". Final Report, August 1978.

NOBLE, RICHARD D.

Noble, R.D. "Kerogen Decomposition Under Elevated Pressure", Confab '78 on Fossil Fuel Chemistry and Energy, Laramie Energy Technology Center, Saratoga, WY, July 1978.

Noble, R.D. "Kerogen Decomposition Under Elevated Pressure", Recent Advances in Oil Shale Technology, 86th National AIChE Meeting, Houston, TX, April 1979.

Noble, R.D. "Retorting of Oil Shale Under Constant Temperature Rate", Confab '79 on Fossil Fuel Chemistry and Energy, Laramie Energy Technology Center, Saratoga, WY, July 1979.

Noble, R.D. "Kinetics of Kerogen Decomposition in Oil Shale". Modeling of Fossil Fuel Processes, 87th National AIChE Meeting, Boston, MA, August 1979.

Noble, R.D. "Modeling and Simulation of Synthetic Fossil Fuel Processes". Summer School on Modeling of Dynamical Systems Based on Experimental Data with Chemical Engineering Applications, Bad Honnef am Rhein, West Germany, August 1980. Proceedings in press.

Tucker, W.; Noble, R.D.; Harris, H.G.; Jackson, L.P. "Thermal Decomposition of Kerogen: Retorting, Separation, and Characterization of Shale Oil", presented at 13th Oil Shale Symposium, Colorado School of Mines, Golden, CO, April 1980.

NOLL, WILLIAM L.

Noll, W.L. "Energy Resources Through the Year 2000". University of Nebraska Press.

NORMAN, VERNON W.

Norman, V.W. "Sediment Yields in Piceance Creek and Yellow Creek Basins, Rio Blanco County, Colorado: 1975-1978". U.S. Geological Survey Open File Report, 1980, in press.

ONDOV, JOHN M.

Ondov, J.M.; Daniels, J.I.; Lamson, K.C.; Anspaugh, L.R. "Potential Atmospheric Emissions from In Situ Oil Shale Retorting with the LLL RISE Process: A Preliminary Assessment of Commercial Control Needs Based on Off-Bas and Product Measurements on the L-3 Retort". Draft report.

PACKER, PAUL E.

Williams, B.D.; Packer, P.E. "Sewage Sludge and Other Organic Materials as Amendments for Revegetation of Spent Oil Shale". In "Utilization of Municipal Sewage Effluent and Sludge on Forest and Disturbed Lands", Sopper, W.E.; Kerr, S.N., Eds. Proceedings of the Symposium conducted by the School of Forest Resources and the Institute for Research on Land and Water Resources, Pennsylvania State University, Pennsylvania State University Press, 353-358.

PARRISH, R. LEON

Parrish, R.L. "The Rock Springs Site 12 Hydraulic/Explosive True In Situ Oil Shale Fracturing Experiment". SAND 79, in press.

PAULSON, NEIL R.

Paulson, N.R.; Hough, W.; Baker, J.O. "The Clean Air Act: An Analytical Discussion". Forest Service Department of Agriculture, Washington, DC, January 1978.

PEARSON, MICHAEL J.

Thoem, T.; Bates, E., Eds. "Environmental Perspective on the Emerging Oil Shale Industry". to be published by the Environmental Protection Agency, Denver, Cincinnati or Washington, DC.

PERSOFF, PETER

Fox, J.P.; Pershoff, P.; Moody, M.M.; Sisemore, C.J. "A Strategy for the Abandonment of Modified In Situ Oil Shale Retorts", presented at the Environmental Control Symposium, Washington, DC, November 1978, LBL-8426.

Persoff, P. "Control Technologies for Abandoned In Situ Oil Shale Retorts--Literature Survey". LBL-8780.

Persoff, P. "Control Technologies for In Situ Oil Shale Retorts", presented at 12th Annual Oil Shale Symposium, Golden, CO, 1979.

POULSON, RICHARD E.

Anderson, A.D.; Lebsack, M.E.; Farrier, D.S.; Poulson, R.E. "Effects of an Oil Shale Retort Water on Rainbow Trout". Abstract published in program of 175th ACS Meeting, Anaheim, CA, March 1978.

Farrier, D.S.; Virgona, J.E.; Phillips, T.E.; Poulson, R.E. "Environmental Research for In Situ Oil Shale Processing". Proceedings of 11th Oil Shale Symposium, Colorado School of Mines, Golden, CO, November 1978, 81-99.

Farrier, D.S.; Harrington, L.W.; Poulson, R.E. "Integrated Compliance and Control Technology Research Activities for In Situ Fossil Fuel Processing Experiments", presented at U.S. DOE Environmental Control Symposium, Washington, DC, November 1978.

Fox, J.P.; Farrier, D.S.; Poulson, R.E. "Chemical Characterization and Analytical Consideration for an In Situ Oil Shale Process Water". DOE-LETC/RI-78/7, 1978, 47 pp.

Fox, J.P.; McLaughlin, R.D.; Bartke, T.C.; Duvall, J.J.; Mason, K.K.; Poulson, R.E. "Mercury Emissions from a Simulated In Situ Oil Shale Retort". Proceedings of 11th Oil Shale Symposium, Colorado School of Mines Press, Golden, CO, November 1978, pp. 55-75.

Harding, B.L.; Linstedt, K.D.; Bennett, E.R.; Poulson, R.E. "Treatment Evaluation for Oil Shale Retort Water". Industrial Wastes 1978, 24(5), 28-33.

Jackson, L.P.; Albright, C.S.; Poulson, R.E. "Olefin Analysis in Shale Oils". In "Analytical Chemistry of Liquid Fuel Sources, Tar Sands, Oil Shale, Coal and Petroleum". Uden, P.C.; Siggia, S.; Jenson, H.B., Eds. Advances in Chemistry Series, 170, Washington, DC, Ch. 16, 1978, pp. 232-242.

Manahan, S.E.; Poulson, R.E.; Green, J.B.; Farrier, D.S. "Coal Humic Substances and Their Application to Pollution Control in the Synthetic Fuels Industry". DOE-LETC/RI-78/5, 1978.

Manaham, S.E.; Poulson, R.E.; Farrier, D.S.; Green, J.B. "Coal Humic Substances for Pollution Control in the Synthetic Fuels Industry". Div. Fuel Chem. 1978, 23(2), 187-192.

Murphy, C.L.; Hines, A.L.; Poulson, R.E. "Hot Gas Stripping of Simulated In Situ Oil Shale Water". Div. Fuel Chem. 1978, 23(2), 193-201.

Nelson, K.F.; North, D.S.; Payne, G.R.; Anderson, A.D.; Poulson, R.E.; Farrier, D.S. "The Effect of an In Situ Produced Oil Shale Processing Water on Metabolism". Arch. Environ. Contam. Toxicol. 1978, 7, 273-281.

Nelson, K.F.; North, D.S.; Payne, G.R.; Anderson, A.D.; Poulson, R.E.; Farrier, D.S. "The Effect of an In Situ Produced Oil Shale Processing Water on Metabolism". Abstract published in program of 175th ACS Meeting, Anaheim, CA, March 1978.

Ossio, E.A.; Fox, J.P.; Thomas, J.F.; Poulson, R.E. "Anaerobic Fermentation of Simulated In Situ Oil Shale Retort Water". Div. Fuel Chem. 1978, 23(2), 202-213.

Virgona, J.E.; Poulson, R.E.; Spedding, T.J. "Summary of the Environmental Monitoring at the Rock Springs, Wyoming Site No. 9 True In Situ Oil Shale Retorting Experiment". DOE-LETC/RI, in press.

Farrier, D.S.; Fox, J.P.; Poulson, R.E. "Interlaboratory, Multimethod Study of an In Situ Produced Oil Shale Process Water", presented at EPA Oil Shale Sampling, Analysis, and Quality Assurance Symposium, Denver, CO, March 1979.

PROBSTEIN, RONALD F.

Probstein, R.F.; Gold, H. "Water in Synthetic Fuel Production-The Technology and Alternatives". MIT Press: Cambridge, MA, 1978.

Probstein, R.F. "Water Sufficiency for a Synthetic Fuels Industry". Technol. Rev. 1979, 81(8), 3-9.

Nevens, T.D.; Culbertson, W.J.; Wallace, J.R.; Taylor, G.C.; Jovanovich, A.P.; Prien, C.H.; Hicks, R.E.; Probstein, R.F. "Predicted Costs of Environmental Controls for a Commercial Oil Shale Industry", Vol. I: "An Engineering Analysis". In "Environmental Control Costs for Oil Shale Processes". U.S. Department of Energy Assistant Secretary for Environment, Office of Technology Impacts, DOE Report No. DOE/EV-0055, Washington, DC, October 1979.

Probstein, R.F.; Hicks, R.E. "Water Management in Surface and In Situ Oil Shale Processing". In Water 1979, AIChE, New York, 1980, in press.

Probstein, R.F.; Hicks, R.E.; Wei, I. "Wastewater Treatment and Management at Oil Shale Plants", Proceedings of 13th Oil Shale Symposium, Golden, CO, Colorado School of Mines Press, 1980, in press.

Probstein, R.F.; Gold, H.; Hicks, R.E. "Water Requirements, Pollution Effects and Costs of Water Supply Treatment for the Oil Shale Industry". U.S. Office of Technology Assessment, 1980, in press.

RALEY, JOHN H.

Raley, J.H.; Sandholtz, W.A.; Ackerman, F.J. "Results from Simulated, Modified In-Situ Retorting in Pilot Retorts". 11th Oil Shale Symposium Proceedings, Golden, CO. Colorado School of Mines Press, 1978, p. 331.

Raley, J.H. "Evaluation of Retort Performance from Gas Data". 12th Oil Shale Symposium Proceedings, Golden, CO. Colorado School of Mines Press, 1979, p. 342.

Raley, J.H. "Monitoring Oil Shale Retorts by Off-Gas Alkene/Alkane Ratios". forthcoming UCRL, Lawrence Livermore Laboratory, Oil Shale Project, under auspices of the Department of Energy, contract No. W-7405-ENG-48.

RAMSEY, JERRY W.

Ramsey, J.W.; Hildebrand, R. "Jet Fuels from Shale Oil: A Near Turn Technology", Proceedings of 13th Energy Conversion Engineering Conference, Vol. 1, 1978, 322-328.

REDENTE, EDWARD

Redente, E.; Ruzzon, W.J. "Revegetation of Retorted Oil Shale Material: Top Soil Depth Study". Proceedings of EPA Oil Shale Symposium on Sampling, Analysis and Quality Assurance, Denver, CO, March 1979.

Reeves, B.; Moorman, T.; Schwab, S.; Redente, E. "Correlations Among Land Distribution: Mycorrhizal Infection Protection, and Vegetation Cover in a Midevaluation Sagebrush Community". Amer. Assn. Advancement of Science 1979.

Kiel, J.; Reeves, B.; Redente, E.; Cook, C. "The Role of Endomycorrhizae in Revegetation Practices in the Semi-Arid West". Am. J. Botany 1979.

Redente, E.; Ruzzon, W. "Topsoiling of Retorted Oil Shale", Proceedings of Surface Mining Hydrology, Sedimentology and Reclamation, Lexington, KY.

Cook, C.; Redente, E.; Bert, W.; Ruzzo, W. "Retorted Oil Shale Management", Proceed ings of 2nd Environmental Control Symposium, U.S. Department of Energy, 1980.

RICHARDS, NORMAN L.

Richards, N.L. "Effects of Chemicals Used in Oil and Gas Well Drilling Operations in Aquatic Environments", presented at 4th National Conference on Interagency Energy/ Environment R&D Program, Washington, DC, June 1979.

Richards, N.L. "Accumulation of Model Oil Shale Compounds by Marine Organisms", presented at 2nd International Marine Pollution Symposium, Croatia, Yugoslavia, October 1977.

ROBBINS, MARTIN D.

Colorado Energy Research Institute. "Oil Shale in Colorado: The 1980s". Golden, CO, 1979.

Colorado Energy Research Institute. "Energy Resources in Colorado: Coal, Oil Shale and Uranium". Golden, CO, 1979.

Colorado Energy Research Institute. "Minerals Severance Taxes in the Western States: A Comparison". Golden, CO, 1979.

ROBERTS, CHARLES G.

Roberts, C.G. "Surface Impoundment Assessment (of Groundwater Quality Impact)".

ROBSON, STANLEY G.

Robson, S.G.; Saulnier, Jr., G.J. "Hydrogeochemistry and Submitted Solute Transport, Piceance Basin, Northwestern Colorado". U.S. Geological Survey Paper, 1980.

ROTARIU, GEORGE J.

Rotariu, G.J. (coordinator). "Magneto Hydrodynamics-EDP". May 1979.

Rotariu, G.J. (coordinator). "Oil Shale-EDP". October 1979.

Rotariu, G.J. (coordinator). "Enhanced Oil Recovery-EDP". October 1979.

Rotariu, G.J. (coordinator). "Unconventional Gas Recovery-EDP". October 1979.

Rotariu, G.J. (coordinator). "MHD-ERD". December 1979.

Rotariu, G.J. (co-author). "Unconventional Gas Assessment". 1980.

Rotariu, G.J. (co-author). "Enhanced Oil Recovery Assessment". 1980.

Rotariu, G.J. (co-author). "Oil Shale Assessment". 1980.

ROTHMAN, ALBERT J.

Sandholtz, W.A.; Ackerman, F.J.; Rothman, A.J.; Miller, M.C.; Cope, E.; Ronchetto, J.J. "The Lawrence Livermore Laboratory Oil Shale Retorts". September 1978, UCRL-52551.

Rothman, A.J. "Recent Experimental Developments in Retorting Oil Shale at the Lawrence Livermore Laboratory", presented at AIChE National Meeting, Miami, FL, November 1978, UCRL-80914.

Rothman, A.J. "Recent Experimental Developments in Retorting Oil Shale at LLL", Proceedings of the Institute of Gas Technology Symposium, December 1979, Atlanta, GA, UCRL-83569.

RUBIN, IRA B.

Rubin, I.B.; Bayne, C.K. "Statistical Designs for the Optimization of the Nitrogen-Phosphorus Gas Chromatographic Detector Response". Anal. Chem. 1979, 51, 541.

RUDNICK, JON

Rudnick, J.; Voelz, G. "An Occupation Health Study of Oil Shale Workers". Proceedings of Conference on Environmental Toxicology, Dayton, OH, March 1979.

Rudnick, J.; Voelz, G. "Medical Study of Oil Shale Workers", Proceedings of Conference on Health Implications of New Energy Technology, Park Center, UT, April 1979.

RUNNELLS, DONALD D.

Stollenwerk, K.; Runnells, D.D. "Geochemistry of Aqueous Leachates from Oil Shale and Their Environmental Impact" submitted for publication in Environ. Sci. Technol.

Saether, O.; Runnells, D.D. "Geochemistry of Fluorine in Oil Shale, Northwestern Colorado". submitted for publication in Geological Soc. of Amer. Bull.

RUSSELL, PETER PAUL

Russell, P.P.; Horne, A.J.; Thomas, J.F. "The Application of Laboratory Scale Model Streams Towards Assessing Effluent Impacts in Freshwater Lotic Environments", Proceedings of Symposium on Ecological Assessment of Effluent Impacts on Communities of Indigenous Aquatic Organisms, American Society of Testing Materials, 1979, and LBL Report LBL-8732.

Russell, P.P.; Resh, V.H.; Flynn, T.S. "Two Species of Caddisfly Larvae as Indicators of Environmental Stress from Oil Shale Related Effluents", Proceedings of Oil Shale Sampling, Analysis, and Quality Assurance Symposium, U.S. Environmental Protection Agency, 1979, and LBL Report LBL-8732.

Russell, P.P. "The Effects of Oil Shale Related Effluents on Some Benthic Fresh Water Organisms". Ph.D. Thesis, University of California, Berkeley, CA, 1979.

SANDHOLTZ, WILLIS A.

Sandholtz, W.A.; Ackerman, F.J.; Rothman, A.J.; Miller, W.C.; Cope, E.; Ronchetto, J. "The Lawrence Livermore Laboratory Oil Shale Retorts". (UCRL-52551), September 1978.

Galloway, T.R.; Sandholtz, W.A. "Comparison of Flow Non-Uniformities in Oil Shale Pilot Retorts with Those Predicted by Numerical Flow Simulations". (UCRL-82032), March 1979.

Raley, J.H.; Sandholtz, W.A.; Ackerman, F.J. "Results from Simulated, Modified In Situ Retorting on Pilot Retorts". (UCRL-80544), April 1978.

Galloway, T.R.; Sandholtz, W.A. "In Situ Oil Shale Retorts: Coupling of Heat and Mass Transfer". (UCRL-83348), September 1979.

Sandholtz, W.A. "Some Relationships of Thermal Effects to Rubble Bed Structure and Gas Flow Patterns in Oil Shale Retorts". (UCRL-83740), in press.

SAULNIER, GEORGE J.

Robson, S.G.; Saulnier, G. "Hydrogeochemistry and Simulated Solute Transport, Piceance Basin, Northwestern Colorado". U.S. Geological Survey Professional Paper, 82-72.

Welder, F.A.; Saulnier, G. "Geohydrologic Data from 24 Test Holes, Piceance Basin, Rio Blanco County, Colorado". U.S. Geological Survey Open File Report 78-734, 1978.

SCHAMBRA, PHILIP E.

Schambra, P.E. "Proceedings of a Workshop on Health Effects of Oil Shale Development" Environ. Health Perspect. 1979, 30, 139-223.

SCHMIDT-COLLERUS, JOSEF J.

Schmidt-Collerus, J.J. "Biphenyl Hydroxylase Activity and the Detection of Carcinogens", presented at Conference on Toxic and Mutagenic Compounds in Oceans, Gulf Breeze, FL, August 1978.

Schmidt-Collerus, J.J. "Spontaneous Combustion Liability of Subbituminous Coals: A Simplified Test Method". In Advances in Chemistry Series, American Chemical Society, Anal. Chem. Liquid Fuel Sources 1978, No. 170.

Schmidt-Collerus, J.J. "Development of Enzymatic Systems for Screening of Mutagens and Carcinogens in Environmental Pollutants". Final Report on Project 5655 to EPA, Gulf Breeze, FL, April 1979.

Schmidt-Collerus, J.J. "Comparative Mutagenisis of Fractures from the Synthetic Fuel Technologies", Proceedings of EPA Symposium on Oil Shale Sampling, Analysis and Quality Assurance, Denver, CO, March 1979.

Schmidt-Collerus, J.J. "Investigation of the Relationship Between Organic Matter and Uranium Deposit". Final Report on Project 5473 to DOE, July 1979.

Schmidt-Collerus, J.J. "Characterization of Contaminants in Oil Shale Residuals and the Potential for Their Management to Meet Environmental Quality Standards". Final Report to NSF (RANN) on Contract AEN-75-00175-A01, 1980, in press.

SCHOTTLER, GEORGE R.

Schottler, G.R.; Leonard, G.J. "Environmental Analysis for the Bureau of Mines Oil Shale Research Facilities", Proceedings of 12th Oil Shale Symposium, Colorado School of Mines, Golden, CO, 1979.

SEDMAN, CHARLES B.

Sedman, C.B. "Background Information Document for Industrial Boiler". NSPS, 1980.

SHAFFRON, MICHAEL

Shaffron, M. "Overview of the Environmental Problems of Oil Shale Development". EPA Contract No. 68-03-2795, to be published by EPA, 1981.

SHEERIN, JOHN C.

Sheerin, J.C. "U.S. Petroleum Depletion under Price Controls". J. Ener. Devel. , in press.

Sheerin, J.C. "Refinery Complexity and Trends in Petroleum Imports". U.S. Department of Energy, 1980.

Sheerin, J.C. "Modeling Oil Shale Ventures". 1980.

SIEK, ROBERT D.

Siek, R.D. "Colorado Joint Review Process Manual". January 1980.

Siek, R.D. "Colorado Energy Resource Development Plan Methodology". December 1980.

SKINNER, QUINTON

Skinner, Q.; Sexton, J.; Asplund, R.D.; Moore, T.S.; Farrier, D. "Phytotoxicity in Plant Response to Aqueous Affluents Derived from the In Situ Oil Shale Process". Proceedings of 12th Annual Oil Shale Symposium, Colorado School of Mines, Golden, CO, 1979.

Skinner, Q.; Moore, T.S.; Asplund, R.O.; Sexton, J.C.; Farrier, D.S. "Plant Responses to Aqueous Affluents Derived from In Situ Fossil Fuel Processing: 1. Development of Screening Methods". LETC Report of Investigation, No. LETC/RI-7914, 1979.

Skinner, Q.; Moore, T.S.; Sexton, J.C.; Asplund, R.O.; Farrier, D. "Phytotoxic Response of 10 Range Grass Species to Two In Situ Oil Shale Retort Waters", presented at 33rd Annual Meeting of Society of Range Management, San Diego, CA, February 1980.

SMITH, JOHN WARD

Smith, J.W.; Jensen, H.B. "Oil Shale". In "Encyclopedia of Energy"; McGraw-Hill: New York, 1979.

Chong, K.P.; Smith, J.W.; Kihaliki, B.A. "Creep and Relaxation of Oil Shale", Proceedings of 19th U.S. Rock Mechanics Symposium, University of Nevada at Reno, 1978.

Chang, B.; Costello, K.; Chong, K.P.; Smith, J.W. "The Fugitive Test of Oil Shale", Proceedings of 19th U.S. Rock Mechanics Symposium, University of Nevada at Reno, 1978.

Smith, J.W.; Beard, T.N.; Trubell, L.G. "Oil Shale Resources of the Naval Oil Shale Reserve #1 Colorado". Laramie Energy Technology Center Report of Investigators, 1979/2, 57 pp.

Johnson, D.R.; Smith, J.W.; Young, N.B. "Stratic Graphic Variations of Oil Shale Ethalpy of Retorting Through the Green River Formation of the Colorado Ca Track". Laramie Energy Technology Center Report of Investigators, 1979/9, 16 pp.

Davis, F.G.; Smith, J.W. "A Case of an Apaction of Computer Mapping in Oil Shale Resource Mapping", Proceedings of Harvard Computer Graphics Conference, Cambridge, MA, July 1979, 18 pp.

Chong, K.P.; Uenishi, K.; Smith, J.W. "Complete Elastic Constant and Stiffness Coervice for Oil Shale". Laramie Energy Technology Center Report of Investigator, 1979/8, 34 pp.

Chong, K.P.; Uenishi, K.; Munari, A.C.; Smith, J.W. "Three Dimension Characterization of the Mechanic Properties of Colorado Oil Shale", Proceedings of the 20th U.S. Symposium on Rock Mechanics, University of Texas, 1979, 309-373.

Chong, K.P.; Smith, J.W.; Chang, B.; Roine, S. "Oil Shale Properties by Split Cylinder Method". Journal of Geotechnical Engineering Division, ASCE, Vol. 105, No. GT5, Proceedings Paper 14567, May 1979, 595-611.

SOHN, HONG Y.

Shigh, S.M.; Sohn, H.Y. "A Mathematical Model for the Retorting of a Large Block of Oil Shale: Effect of the Internal Temperature Gradient". Fuel 1978, 57, 622.

Sohn, H.Y. "The Production of Liquid Fuels and Chemical Feedstocks from Oil Shale". Energy (Korea) 1979, 2(2), 44.

Sohn, H.Y. "The Oil Shale Retorting Processes", Proceedings of Park City Environmental Health Conference on "Health Implications of New Energy Technologies". Park City, UT, April 1979, in press.

Sohn, H.Y.; Kim, S.K. "Intrinsic Kinetics of the Reaction Between Oxygen and Carbonaceous Residue in Retorted Oil Shale". I&EC Process Design and Development, in press.

Shigh, S.M.; Sohn, H.Y. "Nonisothermal Determination of the Intrinsic Kinetics of Oil Shale Kerogen Decomposition". I&EC Process Design and Development, in press.

Sohn, H.Y.; Shigh, S.M. "An Approximate Solution for the Retorting of a Large Block of Oil Shale with an Internal Temperature Gradient". submitted for publication in Fuel.

STEVENS, ALDRED L.

Stevens, A.; Boade, R.R.; Long, A.; Haruk, A.E. "True In Situ Processing of Oil Shale-An Evaluation of Current Bed Preparation Technologies". SAND78-2162, February 1979.

Stevens, A.; Parrish, R.L.; Turner, Jr., T.F. "A True In Situ Fracture Experiment-Preliminary Results". J. Petroleum Technol., in press.

STEWART, BILL M.

Stewart, W.M. "Water Management for Oil Shale Mining and Retorting in the Piceance Creek Basin, Colorado", Proceedings of 11th Oil Shale Symposium, Colorado School of Mines, Golden, CO, November 1978.

Stewart, W.M. "Natural Cementation of Retorted Oil Shale", Proceedings of 6th National Conference on Energy and the Environment, Pittsburgh, PA, November 1979.

STUERMER, DANIEL H.

Pimentel, K.D.; Stuermer, D.H.; Moody, M.M. "Sampling Strategies in Groundwater Transport and Fate Studies for In Situ Oil Shale Retorting". Lawrence Livermore Laboratory, Livermore, CA, UCRL-82417, 1979.

Spies, R.B.; Davis, P.H.; Stuermer, D.H. "Effects of Crude Oil on Early Development of Patiria Minata. I. Influence of Chronic Exposure of Parents and the Toxicity of Natural Seep and Other Oils". submitted for publication in Marine Environ. Res. 1979.

Schultz, T.W.; Stuermer, D.H.; Davis, P.H.; Spies, R.B. "Effects of Crude Oil on Early Development of Patiria Miniata. II. Effects of Varying Exposure Time and Short-Term Aging of the Water-Soluble Fraction". submitted for publication in Marine Environ. Res. 1979.

Spies, R.B.; Davis, P.H.; Stuermer, D.H. "Ecology of a Submarine Petroleum Seep". In "Studies in Marine Environmental Pollution". Elsevier Press: New York, in press, 1979.

Mead, S.W.; Wang, F.T.; Ganow, H.C.; Stuermer, D.H. (Check original-I lost something here). "Studies of LLL's Hoe Creek II Underground Coal Gasification Experiment", Proceedings of 5th Underground Coal Conversion Symposium, Alexandria, VA, June 1979.

Garvis, D.G.; Stuermer, C.H. "A Well-Head Instrument Package for Multi-Parameter Measurement During Well Water Sampling". submitted for publication in Water Research, August 1979.

Mead, S.W.; Wang, F.T.; Ganow, H.C.; Stuermer, D.H.; Stone, R. "Groundwater Effects of Underground Coal Gasification Experiments in Northeastern Wyoming", presented at 54th Annual Fall Technical Conference and Exhibition of the Society of Petroleum Engineers of AIME, Las Vegas, NV, September 1979.

Stuermer, D.H.; Moody, M.M. "Environmental, Health and Safety Program for Medium-Btu In Situ Coal Gasification". Lawrence Livermore Laboratory, Livermore, CA, UCID, in preparation, 1979.

Stuermer, D.H.; Ng, D.J.; Morris, C.J.; Cotton, A. "Distribution of Neutral Organic Reaction By-products in the Groundwater at an Underground Coal Gasification Site". Lawrence Livermore Laboratory, Livermore, CA, UCRL-52847, in preparation, 1979.

TAYLOR, DAVID R.

Hughes, M.M.; Natusch, D.F.S.; Taylor, D.R. "Chemical Transformation of Particulate Polycyclic Organic Matter", presented at 4th International Symposium on PAH, October 1979.

Natusch, D.F.S.; Denoyes, E.R.; Keyser, T.R.; Kintov, S.E.; Taylor, D.R. "Surface Analysis of Particules Emitted to the Atmosphere", presented at AIChE, San Francisco, CA, November 1979.

Taylor, D.R.; Tompkins, M.A.; Kirton, S.E.; Mauney, T.; Natusch, D.F.S.; Hyske, P.K.; Kleinherz, N. "Analysis of Fly Ash Produced from Combusion of Refuse Derived Fuel and Coal Mixtures". Environ. Science Technol., in press.

Skogerboe, R.K.; Natusch, D.F.S.; Taylor, D.R.; Dick, D.L. "Potential Toxic Effects of Aquatic Biota from Oil Shale Development", Proceedings of 11th Annual Oil Shale Symposium, Colorado School of Mines, Golden, CO, 1978, 43-46.

TAYLOR, GRAHAM C.

Nevens, T.D.; Culbertson, W.J.; Wallace, J.R.; Taylor, G.C.; Jovanovich, A.P.; Prien, C.H.; Hicks, R.E.; Probstein, R.F. "Predicted Costs of Environmental Controls for a Commercial Oil Shale Industry", Vol. I: "An Engineering Analysis". In "Environmental Control Costs for Oil Shale Processes". U.S. Department of Energy Assistant Secretary for Environment, Office of Technology Impacts, DOE Report No. DOE/EV-0055, Washington, DC, October 1979.

Jovanovich, A.P.; Stone, M.L.; Taylor, G.C. "Predicted Costs of Environmental Controls for a Commercial Oil Shale Industry". Vol. II: "A Subjective Self-Assessment of Uncertainty in the Predicted Costs". Prepared for the U.S. Department of Energy under Contract No. EP-78-S-502-5107 by the University of Denver, Denver Research Institute, Denver, CO, July 1979.

THOMAS, HAROLD E.

Thomas, H.E. "Rock Fracturing Applied to Fossil Fuel Recovery State-of-the-Art".

THOMAS, ROBERT W.

Melancon, S.M.; Hess, B.C.; Thomas, R.W. "Assessment of Energy Resource Development Impact on Water Quality: White and Yampa River Basin". Environmental Protection Agency, Las Vegas, NV, in press.

THURNAU, ROBERT C.

Thurnau, R.C. "Distribution of Trace Metals". February 1980.

Thurnau, R.C. "Report (Manual of Methods)". March 1980.

TICHENOR, BRUCE A.

Tichenor, B.A.; Hustuedt, K.C.; Weber, R.C. "Controlling Petroleum Refinery Fugitive Emissions via Leak Detection and Repair", presented at the EPA Symposium on Atmospheric Emissions from Petroleum Refineries, Houston, TX, November 1979.

TIMOURIAN, HECTOR

Timourian, H. "Application of a Battery of Short-term Bioassays for Testing Genetic Toxicity of Paraho Shale Oil Product", Proceedings of EPA/ORNL Synfuel Meeting, EPA-Research Triangle Park, NC, April 1979.

TOOLEY, JOHN E.

Tooley, J.E. "Sedimented and Erosion Characteristics, Southeast Uinta Basin, Utah and Colorado". U.S. Geologic Survey Water Supply Paper, in preparation.

TORPY, MICHAEL F.

Torpy, M.F. "Water Quality/Water Resources Impacts from Oil Shale in the Piceance Creek Basin". Report of the Energy and Environmental Systems Division, due August 1980.

UTTER, STEPHEN

Utter, S. "Environmental Assessment of an Oil Shale Installation", presented at 6th Annual UMR-DNR Conference and Exposition on Energy.

Rajaram, V.; Bolmer, R.L.; Utter, S. "USBM Plans Mining and Environmental Research Project for Oil Shale Deposits". Eng. Mining J., December 1978.

Utter, S.; Hawkins, J.E. "Drilling and Casing a Large-Diameter Shaft in the Piceance Creek Basin", 11th Oil Shale Symposium Proceedings, Colorado School of Mines, Golden, CO, November 1978.

Utter, S.; Hawkins, J.E.; Widows, J.R. "Bureau of Mines Core Holes 01, 01-A, and 02-A in the Piceance Creek Basin, Colorado". Bureau of Mines Report of Investigations, Geologic/Hydrologic Investigation Project, 1979.

VIRGONA, JOSEPH E.

Farrier, D.S.; Virgona, J.E.; Phillips, T.E.; Poulson, R.E. "Environmental Research for In Situ Oil Shale Processing", Proceedings of 11th Oil Shale Symposium, April 1978.

Virgona, J.E.; Poulson, R.E.; Spedding, T.S. "Environmental Study of the Rock Springs, Wyoming Site Number 9 True In Situ Oil Shale Retorting Experiment". U.S. Department of Energy Report of Investigation, Washington, DC, June 1979.

Merriam, N.W.; Long, Jr., A.; Virgona, J.E.; Parrish, R.L. "A True In Situ Oil Shale Retorting Experiment at Rock Springs Number 12". U.S. Department of Energy Report of Investigation, Washington, DC, in draft, June 1980.

VOELZ, GEORGE L.

Voelz, G.L. "An Occupational Health Study of Oil Shale Workers". Proceedings of 9th Annual Conference on Environmental Toxicology, sponsored by University of California, Irvine, at Wright-Patterson Air Force Base, Dayton, OH, March 1979.

WAGNER, PAUL

Wagner, P.; Acton, R.U. "Thermophysical Properties: Some Experiences in Research, Development and Applications", Proceedings of 15th Conference on Thermal Conductivity, p. 107 f, 1978.

Wagner, P.; Acton, R.U.. "Thermophysical Properties: Some Experiences in Research, Development and Applications", Proceedings of 6th International Symposium on Thermal Expansion, p. 19 f, 1978.

Vanderborgh, N.E.; Bertino, J.P.; Cort, G.E.; Wagner, P. "Heat Transfer Through Coals and Other Naturally Occurring Carbonaceous Rocks", Proceedings of 6th International Symposium on Thermal Expansion, 1979, p. 19 f; and In Situ 1978, 2, 217.

Wewerka, E.M.; Williams, J.M.; Vanderborgh, N.E.; Harmon, A.W.; Wagner, P.W.; Wanke, P.L.; Olsen, J.D. "Trace Elements Characterization of Coal Wastes-Second Annual Report". DOE/EPA Interagency Report, EPA-600/7-78-028a, LA-7360-PR, July 1978.

Wewerka, E.M.; Williams, J.M.; Wangen, L.E.; Bertino, J.P.; Wagner, P.; Wanke, P.L.; Olsen, J.D. "Trace Element Characterization and Removal/ Recovery from Coal and Coal Wastes". Quarterly Report No. 10, DOE Progress Report for January 1978 to March 1978.

Wewerka, E.M.; Williams, J.M.; Wagner, P.; Wangen, L.E.; Bertino, J.P. "Control of Trace Element Leaching from Coal Preparation Wastes", Proceedings of USEPA Symposium on Coal Cleaning, Hollywood, FL, September 1978 (LA-UR-2508).

Wagner, P.; Wewerka, E.M.; Williams, J.M. "Trace Element Assessment in Coal Preparation Waste Drainages". Abstract. submitted for publication in Proceedings of Federation of Analytical Chemistry and Spectroscopy Societies Meeting, Boston, MA, November 1978.

Wewerka, E.M.; Williams, J.M.; Wangen, L.E.; Bertino, J.P.; Wagner, P.; Wanek, P.L.; Olsen, J.D. "Trace Element Characterization and Removal/ Recovery from Coal and Coal Wastes", Quarterly Report No. 11, DOE Progress Report for April 1978 to June 1978.

Wewerka, E.M.; Bertino, J.P.; Wagner, P.; Wangen, L.E.; Williams, J.M.; Wanek, P.L. "Environmental Control Technology for Contaminated Drainage from Coals and Coal Wastes". Proceedings of DOE Environmental Control Symposium, Washington, DC, November 1978.

Wangen, L.E.; Bertino, J.P.; Jones, M.M.; Wagner, P.; Wanek, P.L.; Wewerka, E.M.; Williams, J.M. "Control Technology for Coal Cleaning Wastes", Proceedings of EPRI Workshop on Solid Wastes, San Diego, CA, April 1979.

Wewerka, E.M.; Williams, J.M.; Wangen, L.E.; Bertino, J.P.; Wanek, P.L.; Olsen, J.D.; Thode, E.F.; Wagner, P. "Trace Element Characterization of Coal Wastes-Third Annual Report". DOE/EPA Interagency Report, EPA-600/7-79-144, LA-7831-PR, 1979.

Wangen, L.E.; Bertino, J.P.; Wagner, P.; Wewerka, E.M.; Williams, J.M.; Wanek, P.L. "Control Technology for Coal Cleaning Wastes", presented at ASCE/ PRCEPRI Workshop on Solid Wastes, San Diego, CA, April 1979.

Wagner, P.; Williams, J.M.; Bertino, J.P.; Wangen, L.W.; Wanek, P.L.; Jones, M. "Control Technology Strategy for Coal Preparation Waste Drainages", proceedings of DOE workshop on Waste Water Treatment Processes, Germantown, MD, June 1979.

Wewerka, E.M.; Wagner, P.; Wanek, P.L. "Assessment and Control of Water Contamination Associated with Shale Oil Extraction and Processing: Work Plan". LA-7697, March 1979.

Wagner, P.; Williams, J.M.; Wewerka, E.M.; Bertino, J.P.; Wangen, L.E.; Wanek, P.L.; Thode, E.F. "The Assessment of Trace Element Contamination of the Drainages from Coal Cleaning Wastes", Proceedings of the 72nd AIChE Conference, San Francisco, CA, November 1979.

Wagner, P.; Williams, J.M.; Wewerka, E.M.; Bertino, J.P.; Wangen, L.E.; Wanek, P.L.; Thode, E.F. "Environmental Contamination from Trace Elements in Coal Preparation Wastes", presented at Coal Cleaning Environmental Review, IERL, USEPA, Research Triangle Park, NC, 1979.

Williams, J.M.; Wagner, P.; Wewerka, E.M. "The Use of Multimedia Environmental Goals to Evaluate Potential Hazardous Trace Elements in the Drainage from High Sulfur Coal Preparation Wastes". (open publication now being typed).

Hakkila, E.A.; Elliot, H.E.; Williams, J.M.; Wewerka, E.M. "A Preliminary Study of Green River and Devonian Oil Shales". In "Analytical Chemistry of Liquid Fuel Sources", Uden, P.C.; Siggia, S.; Jensen, H.B., Eds., Advances in Chemistry Series, No. 170, American Chemical Society, 1978.

Wewerka, E.H.; Wagner, P.; Wanek, P.L. "Assessment and Control of Water Contamination Associated with Shale Oil Extraction and Processing: Work Plan", LA-7679, 1979.

WALLACE, JOHN R.

Nevens, T.D.; Culbertson, W.J.; Wallace, J.R.; Taylor, G.C.; Jovanovich, A.P.; Prien, C.H.; Hicks, R.E.; Probstein, R.F. "Predicted Costs of Environmental Controls for a Commercial Oil Shale Industry", Vol. I: "An Engineering Analysis". In "Environmental Control Costs for Oil Shale Processes". U.S. Department of Energy Assistant Secretary for Environment, Office of Technology Impacts, DOE Report No. DOE/EV-0055, Washington, DC, October 1979.

WANEK, PATSY LEE

Wewerka, E.M.; Wagner, P.; Wanek, P.L. "Assessment and Control of Water Contamination Associated with Shale Oil Extraction and Processing: Work Plan". LA-7679, 1979.

WELDER, FRANK A.

Welder, F.A.; Saulnier, Jr., G.J. "Geohydrologic Data from Twenty-Four Test Holes Drilled in the Piceance Basin, Rio Blanco County, Colorado 1975-76". U.S. Geological Survey Open File Report 78-734, 1978.

WEWERKA, EUGENE MICHAEL

Wewerka, E.M.; Wagner, P.; Wanek, P.L. "Assessment and Control of Water Contamination Associated with Shale Oil Extraction and Processing: Work Plan", LA-7679, 1979.

WHITTLESEY, NORMAN K.

Whittlesey, N.K. "Agricultural Impacts of Oil Shale Development". Unpublished working paper No. 46, Natural Resource Economics, ESCS, USDA, 1978.

Gray, S.L.; Sparling, E.W.; Whittlesey, N.K. "Water for Energy Development in the Northern Great Plains and Rocky Mountain Regions". Unpublished report, Natural Resource Economics, ESCS, USDA, 1978.

WILKERSON, CONNIE L.

Wilkerson, C.L. "Comparative Elemental Abundances in Shale Oil and Natural Crude Oils". Annual Report to U.S. Department of Energy, PNL-2850, February 1979.

Evans, J.D.; Wilkerson, C.L.; Fruchter, J.S. "Arsenic Analysis of Oil Shale Process Water: An Example of the Multitechnique Approach". Annual Report to U.S. Department of Energy, PNL-2850, February 1979.

Wilkerson, C.L.; Fruchter, J.S. "Elemental Mass Balance for the Paraho Semiworks Retort". Annual Report to U.S. Department of Energy, PNL-2850, February 1979.

Wilkerson, C.L. "Determination of Mercury and Mercury Species in Flared Product Gas of the Paraho Semiworks Retort". Annual Report to U.S. Department of Energy, PNL-2850, February 1979.

Wilkerson, C.L. "Preparation and Multielement Characterization of a Colorado Oil Shale Deference Material". Annual Report to U.S. Department of Energy, PNL-2850, February 1979.

Wilkerson, C.L. "Neutron Activation Analysis of Coal and Oil Shale Materials with a ^{252}Cf^{235}U Fueled Subcritical Multiplier Facility". Annual Report to U.S. Department of Energy, PNL-2850, February 1979.

Fruchter, J.S.; Wilkerson, C.L.; Evans, J.C.; Sanders, R.W. "Analysis of Oil Shale Products and Effluents: An Example of the Multitechnique Approach", Proceedings of the EPA Oil Shale Sampling, Analysis and Quality Assurance Symposium, Denver, CO, March 1979.

Fruchter, J.S.; Wilkerson, C.L.; Evans, J.C.; Sanders, R.W.; Abel, K.H. "Source Characterization Studies at the Paraho Semiworks Oil Shale Retort". Battelle Pacific Northwest Laboratories Report PNL-2945, May 1979.

Wilkerson, C.L.; Sanders, R.W.; Fruchter, J.S. "Analysis of Shale Oil From an In Situ Process". Annual Report to U.S. Department of Energy, PNL-3000, February 1980.

Fruchter, J.S.; Sanders, R.W.; Wilkerson, C.L. "Analysis of Retort and Associated Water Samples from an In Situ Oil Shale Retort". Annual Report to U.S. Department of Energy, PNL-3000, February 1980.

Wilkerson, C.L. "Neutron Activation Analysis of Oil Shale Retort Waters and Crude Shale Oils". Annual Report to U.S. Department of Energy, PNL-3000, February 1980.

Fruchter, J.S.; Wilkerson, C.L.; Olsen, K.B.; Sanders, R.W. "Analysis of a Spent Shale Core from a Modified In Situ Oil Shale Retort". Annual Report to U.S. Department of Energy, PNL-3000, February 1980.

Wilkerson, C.L.; Fruchter, J.S.; Sklarew, D.S. "Comparison and Contrast of Trace Elements in Crude Shale Oils and Petroleum", presented at the ACS National Meeting, Houston, TX, March 1980.

Fruchter, J.S.; Wilkerson, C.L.; Evans, J.C.; Sanders, R.W. "Analysis of Products and Effluents from an Aboveground Oil Shale Retort Pilot Plant", submitted for publication in Environ. Science Technol., March 1980.

WILLIAMS, RALPH E.

Crookston, R.B.; Atwood, M.T.; Williams, R.E. "An Evaluation of the Fire and Explosion Hazards of Oil Shale Mining and Processing". Final Report to the U.S. Bureau of Mines (Contract J0275001), by the TOSCO Corporation and Denver Research Institute, September 1978.

Williams, R.E.; Zborovszky, Z.; Blunt, R.M.; West, D. "Laboratory and Fire Explosivity Testing of Oil Shale Dust", presented at EPA Oil Shale Sampling, Analysis and Quality Assurance Symposium, Denver, CO, March 1979.

WILLIAMS, TED

Williams, T. "National Energy Plan II". Appendix, Environmental Trends and Impacts, prepared by the Office of the Assistant Secretary for Environment, Department of Energy, May 1979.

Williams, T. "Environmental Analysis of Synthetic Liquid Fuels". Prepared by the Assistant Secretary for Environment, Office of Technology Impacts, Department of Energy, July 1979.

Williams, T. "Synthetic Fuels and the Environment: An Environmental and Regulatory Impacts Analysis". Review Draft, Assistant Secretary for Environment, Office of Technology Impacts, Department of Energy, January 1980.

WITSCHI, HANSPETER

Witschi, H.; Lock, S. "Butylated Hydroxytoluene: A Possible Promoter of Adenoma Formation in Mouse Lung". In "Carcinogenesis, Vol. 2. Mechanisms of Tumor Promotion and Cocarcinogenesis"; Slaga, T.J.; Sivak, A.; Boutwell, R.K., Eds. Raven Press: New York, 1978.

Williamson, D.; Esterez, P.; Witschi, H. "Studies on the Pathogenesis of Butylated Hydroxytoluene-Induced Lung Damage in Mice". Toxicol. Appl. Pharmacol. 1978, 43, 577-587.

Lock, S.; Witschi, H.; Plaa, G.L. "The Effect of Cycloheximide on Bile Flow in Rats (40594)". Proceedings of the Society for Experimental Biology and Medicine, 1979, 161, 546-553.

Haschek, W.M.; Witschi, H. "Pulmonary Fibrosis - A Possible Mechanism". Toxicol. Appl. Pharmacol. 1979, 51, 475-487.

Witschi, H.; Lock, S. "Enhancement of Adenoma Formation in Mouse Lung by Butylated Hydroxytoluene". Toxicol. Appl. Pharmacol. 1979, 50, 391-400.

Haschek, W.M.; Boling, M.E.; Guerin, M.R.; Witschi, H.P. "Pulmonary Toxicity of a Coal Liquefaction Distillate Product", presented at 19th Annual Hanford Life Sciences Symposium on Pulmonary Toxicology of Respirable Particles, Richland, WA, October 1979.

Haschek, W.M.; Meyer, K.R.; Ullrich, R.L.; Witschi, H.P. "Potentiation of Chemically Induced Lung Fibrosis by Thorax Irradiation". Int. J. Radiat. Oncol. Biol. Phy. 1980, in press.

Kehrer, J.P.; Witschi, H. "Effects of Drug Metabolism Inhibitors on Butylated Hydroxytoluene-Induced Pulmonary Toxicity in Mice". Toxicol. Appl. Pharmacol. 1980, in press.

YEATTS, JR., LeROY B.

Yeatts, Jr., L.B.; Griest, W.H. "Comparative Chemical and Physical Characteristics of Airborne Versus Bulk Particulate Samples from an Oil Shale Retorting Facility". to be published in open literature.

Griest, W.H.; Yeatts, Jr., L.B.; Caton, J.E. "Recovery of Polycyclic Aromatic Hydrocarbons Sorbed on Fly Ash for Quantitative Analysis". Anal. Chem., in press.

YESAVAGE, VICTOR F.

Yesavage, V.F. "Light Olefins from Hydrogenated Shale Oil". Chem. Eng. Progress, September 1979, p. 78.

Yesavage, V.F. "Studies on the Utilization of Hydrogenated Shale Oil as a Steam Pyrolysis Feedstock For the Production of Light Olefins". Ener. Commun. 1980.

Yesavage, V.F. "The Utilization of Shale Oil as a Feedstock for Steam Pyrolysis and Petrochemical Intermediate Production". Final Report on DOE Contract EY-76-5-04-3726, 1979.

ZUKOR, STEPHEN H.

Zukor, S.H.; Barwen, E.L. "Department of Energy's 1979 Underground Coal Conversion Program", presented at 5th Underground Coal Conversion Symposium, U.S. DOE, June 1979.

Zukor, S.H. "Oil Shale Technical Readiness", presented at the 7th Energy Technology Conference and Exposition, Washington, DC, March 1980.

FEDERAL, STATE AND UNIVERSITY DIRECTORY

Ackerman, F. Jay

Data Management Group Leader
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6005 FTS: 532-6005
EDUCATION:
B.S., University of California-Berkeley, 1960, Chemical Engineering
M.S., University of California-Berkeley, 1963, Chemical Engineering

Adams, D. Briane

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
P.O. Box 2027
Grand Junction, CO 81501
PHONE: 303/245-5257 FTS: 322-0302
EDUCATION:
B.S., University of Utah, 1971, Civil Engineering
M.S., Massachusetts Institute of Technology, 1974, Civil Engineering

Ahern, John J.

Research Engineer
University of Wyoming
Wyoming Water Resources Research Institute
Box 3076 University Station
Laramie, WY 82071
PHONE: 307/766-2143
EDUCATION:
B.A., Amherst College, 1971, Chemistry
M.S., University of Wisconsin, 1975, Water Resources Management
M.S., University of Wisconsin, 1976, Water Chemistry

Allen, Frederick W.

U.S. Environmental Protection Agency
Office of Planning and Management
Office of Planning and Evaluation
Policy Planning Division
401 M Street, S.W.
PM-221
Washington, DC 20460
PHONE: 202/755-4803 FTS: 755-4803
EDUCATION:
B.A., Yale University, 1969, American Studies
M.B.A., Harvard University, 1973, Business Administration

Altshuler, Morris

Chemical Engineer
U.S. Environmental Protection Agency
Office of Research and Development
Office of Environmental Engineering and Technology
Energy Processes Division
401 M Street, S.W.
Washington, DC 20460
PHONE: 202/426-2683 FTS: 426-2683
EDUCATION:
B.S., City College of New York, 1961, Chemical Engineering

Andrus, Dale R.

State Director
U.S. Department of Interior
Bureau of Land Management
Colorado State Office
1600 Broadway, Room 700
Denver, CO 80202
PHONE: 303/837-4325 FTS: 327-4325
EDUCATION:
B.S., University of Idaho, 1953, Forestry

Anspaugh, Lynn R.

Section Leader
U.S. Department of Energy
Lawrence Livermore Laboratory
Environmental Sciences Division
Analysis and Assessment
P.O. Box 5507, L-453
Livermore, CA 94550
PHONE: 415/422-3880 FTS: 532-3880
EDUCATION:
B.A., Nebraska Wesleyan University, 1959, Physics/Mathematics
M.Bioradiology, University of California-Berkeley, 1961, Bioradiology
Ph.D., University of California-Berkeley, 1963, Biophysics

Armour, Carl L.

Acting Group Leader
U.S. Department of Interior
U.S. Fish and Wildlife Service
Western Energy and Land Use Team
Resource Management Methods Group
2625 Redwing Road
Fort Collins, CO 80526
PHONE: 303/223-2040 FTS: 323-5287
EDUCATION:
B.S., Glenville State College, 1964, Biology
M.S., University of Massachusetts, 1966, Fisheries Biology
Ph.D., University of Idaho, 1969, Fisheries Biology

Ash, Henry O.

Chairman Oil Shale Environmental Advisory Panel
U.S. Department of Interior
Denver Federal Center
Room 820-A, Building 67
Denver, CO 80225
PHONE: 303/234-3275 FTS: 234-3275
EDUCATION:
B.S., University of New Mexico, 1955, Geology
M.S., University of New Mexico, 1958, Geology

Asplund, R. Owen

Professor
University of Wyoming
Department of Chemistry
Laramie, WY 82071
PHONE: 307/766-4360
EDUCATION:
B.Sc., University of Alberta, 1949, Chemistry
M.S., Utah State University, 1955, Biochemistry
Ph.D., West Virginia University, 1958, Biochemistry

Attfield, Mike

Statistician
U.S. Public Health Service
National Institute of Occupational Safety and Health
Respiratory Disease Studies
Epidemicological Investigations Branch
Center for Disease Control
944 Chestnut Ridge Road
Morgantown, WV 26505
PHONE: 304/599-7501 FTS: 923-7501
EDUCATION:
B.Sc., University of Wales, 1968, Statistics

Barker, Lawrence K.

Chemical Engineer
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
B.S., University of Wyoming, 1967, Chemical Engineering
M.S., University of Wyoming, 1974, Chemical Engineering

Barnes, H. Michael

Research Chemist
U.S. Environmental Protection Agency
Office of Research and Development
Environmental Sciences Research Lab
Aerosol Research Branch
MS-57
Research Triangle Park, NC 27711
PHONE: 919/541-2184 FTS: 629-2184
EDUCATION:
B.S., Louisiana State University, 1960, Chemistry
M.S., Louisiana State University, 1962, Chemistry
Ph.D., Louisiana State University, 1969, Chemistry

Barry, III, Hamlet J.

Director
State of Colorado
Department of Natural Resources
Division of Mined Land Reclamation
1313 Sherman Street, Room 723
Denver, CO 80203
PHONE: 303/839-3567
EDUCATION:
B.A., Yale University, 1966, American Studies
J.D., Columbia University, 1969, Law

Barse, Joseph R.

U.S. Department of Agriculture
Economics, Statistics and Cooperatives Service
Natural Resource Economics
Room 404
Washington, DC 20250
PHONE: 202/447-4859 FTS: 447-4859
EDUCATION:
B.S., Northwestern University, 1952
M.A., Columbia University, 1954

Bateman, Richard L.

Hydrologist
U.S. Environmental Protection Agency
Office of Research and Development
Environmental Monitoring Systems Lab
P.O. Box 15027
Las Vegas, NV 89114
PHONE: 702/736-2969x313 FTS: 595-2969x313
EDUCATION:
B.S., Syracuse University, 1966, Geology
M.S., University of Nevada, 1970, Hydrology
Ph.D., University of Nevada, 1976, Hydrology

Bates, Ed

Physical Scientist
U.S. Environmental Protection Agency
Industrial Environmental Research Laboratory-Cincinnati
Extraction Technology Branch
Resource Extraction and Handling
Cincinnati, OH 45268
PHONE: 513/684-4417 FTS: 684-4417
EDUCATION:
B.S., Michigan State University, 1968, Geology
M.S., Michigan State University, 1970, Geology

Baughman, George L.

Chief
U.S. Environmental Protection Agency
Athens Environmental Research Laboratory
Environmental Processes Branch
College Station Road
Athens, GA 30605
PHONE: 404/546-3145 FTS: 250-3145
EDUCATION:
B.S., Florida State University, 1960, Chemistry

Berg, W. A.

Professor
Colorado State University
Department of Agronomy
Fort Collins, CO 80523
PHONE: 303/491-6483
EDUCATION:
Ph.D., North Carolina State University, 1960

Bergman, Harold L.

Assistant Professor
University of Wyoming
Department of Zoology and
Department of Physiology
Laramie, WY 82071
PHONE: 307/766-4330
EDUCATION:
B.S., Eastern Michigan University, 1968, Biology
M.S., Eastern Michigan University, 1971, Biology
Ph.D., Michigan State University, 1973, Fisheries Biology

Bessinger, Glen

Division Chief
U.S. Department of Interior
Bureau of Land Management
Casper District Office
Division of Planning and Environmental Coordination
951 Union Boulevard
Casper, WY 82601
PHONE: 307/265-5550x5101 FTS: 328-5101
EDUCATION:
B.S., Oklahoma State University, 1967, Forestry
M.S., Oklahoma State University, 1973, Forestry

Biesinger, Kenneth E.

Director
U.S. Environmental Protection Agency
Environmental Research Laboratory
Extramural Programs
6201 Congdon Boulevard
Duluth, MN 55804
PHONE: 218/727-6692 FTS: 783-9524
EDUCATION:
B.S., Utah State University, 1958, Wildlife Management
M.S., Utah State University, 1961, Fishery Biology
Ph.D., University of Michigan, 1967, Limnology

Bishard, P.E., A. C.

Chief of Stationary Sources Programs
State of Colorado
Colorado Department of Health
Stationary Sources Programs
4210 East 11th Avenue
Denver, CO 80220
PHONE: 303/320-4180
EDUCATION:
B.S., Colorado State University, 1960, Engineering

Blair, M.D., Joseph R.

Acting Director
U.S. Department of Energy
Office of Environment
Office of Health and Environmental Research
Human Health and Assessment Division
E-201
Washington, DC 20545
PHONE: 301/353-3269 FTS: 233-3269
EDUCATION:
B.S., Duke University, 1935
M.S., Vanderbilt University, 1937
B.A./M.A., University of New England, 1939
M.D., Jefferson, 1945

Blakey, James S.

District Chief-Colorado
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
Denver Federal Center
MS-415
Denver, CO 80225
PHONE: 303/234-5092 FTS: 234-5092
EDUCATION:
B.A., East Texas State University, 1955, Biochemistry

Blaney, Benjamin L.

Physical Scientist
U.S. Environmental Protection Agency
Industrial Environmental Research Laboratory-Cincinnati
26 West St. Clair Street
Room 204 Ridge Facility
Cincinnati, OH 45268
PHONE: 513/684-4338 FTS: 684-4338
EDUCATION:
B.A., Cornell University, 1967, Physics
M.S., Northwestern University, 1968, Chemistry
Ph.D., University of Chicago, 1975, Chemistry

Bleistein, Sandra

Research Economist
University of Denver
Denver Research Institute
Industrial Economics Division
Denver, CO 80208
PHONE: 303/753-2379
EDUCATION:
B.S., Brooklyn College, 1961, Mathematics
M.S., New York University, 1966, Mathematics
Ph.D., Colorado School of Mines, 1979, Mineral Economics

Bloomfield, Roger A.

Staff Engineer
U.S. Department of Interior
Bureau of Mines
2401 E Street, N.W.
Washington, DC 20241
PHONE: 202/634-1237 FTS: 634-1237
EDUCATION:
B.S., University of Rhode Island, 1974
M.S., University of Idaho, 1975

Bock, Jane H.

Associate Professor
University of Colorado
Department of EPO Biology
Campus Box 334
Boulder, CO 80309
PHONE: 303/492-7758
EDUCATION:
B.A., Duke University, 1958, Botany
M.A., University of Indiana, 1960, Botany
Ph.D., University of California-Berkeley, 1966, Botany

Bocker, Harold M.

Regional Team Leader
Biological Service Program
U.S. Department of Interior
U.S. Fish and Wildlife Service
Biological Services
134 Union Boulevard
Denver, CO 80228
PHONE: 303/234-5586 FTS: 234-5586
EDUCATION:
M.S., Colorado State University, 1953

Boswell, Merlin N.

State Resource Conservationist
U.S. Department of Agriculture
Soil Conservation Service
125 South State Street
Room 4012
Salt Lake City, UT 84138
PHONE: 801/524-5054 FTS: 588-5054
EDUCATION:
B.S., Utah State University, 1951, Agronomy

Bradley, Richard A.

Economist
U.S. Department of Energy
Office of Environment
Office of Technology Impacts
Environmental Impacts Division
E-201
Washington, DC 20545
PHONE: 301/353-3225 FTS: 233-3225
EDUCATION:
B.S., University of California-Riverside, 1968, Economics
M.S., University of California-Riverside, 1974, Economics
Ph.D., University of California-Riverside, 1977, Economics

Brady, Ray A.

Geologist
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
B.S., University of Arizona, 1970, Geology

Brandenburg, Charles F.

Assistant Director
U.S. Department of Energy
Laramie Energy Technology Center
Office of Project Management
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2202 FTS: 328-4202
EDUCATION:
B.S., University of Wyoming, 1962, Chemistry
Ph.D., University of Wyoming, 1969, Chemistry

Branstetter, Barbara

Program Administrator and Project Manager
U.S. Department of Energy
Lawrence Berkeley Laboratory
University of California
Berkeley, CA 94720
PHONE: 415/486-4434
EDUCATION:
Ph.D., University of California-Los Angeles, 1978

Braun, Robert L.

Senior Scientist
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6650 FTS: 532-6650
EDUCATION:
Ph.D., University of Washington, 1966

Breger, Irving A.

Research Chemist
U.S. Department of Interior
U.S. Geological Survey
Coal Resources Division
923 National Center
Reston, VA 22092
PHONE: 703/860-6643 FTS: 928-6643
EDUCATION:
B.S., Worcester Polytechnic Institute, 1941, Chemistry
M.S., Massachusetts Institute of Technology, 1947, Chemistry
Ph.D., Massachusetts Institute of Technology, 1950, Geochemistry

Brewer, George F.

Senior Staff Officer
U.S. Department of Transportation
Office of the Secretary
1050 17th Street, Suite 1822
Denver, CO 80265
PHONE: 303/837-5496 FTS: 327-5496
EDUCATION:
B.S., University of Colorado, 1951, Architectural Engineering

Brookshire, David S.

Assistant Professor/Assistant Director
University of Wyoming
College of Commerce and Industry
Department of Economics
Resource and Environmental Economics Laboratory
Laramie, WY 82071
PHONE: 307/766-6425
EDUCATION:
B.A., University of California-San Diego, 1970, Economics
Ph.D., University of New Mexico, 1976, Resource and Environmental Economics

Bunting, John Stewart

Auditor
U.S. General Accounting Office
2420 West 26th Avenue, Suite 300-D
Denver, CO 80211
PHONE: 303/837-4621 FTS: 327-4621
EDUCATION:
B.A., Thiel College, 1969, Economics
M.B.A., University of Colorado, 1974, Finance
J.D., University of Denver, 1979, Natural Resources Law

Burnham, Alan K.

Chemist
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-7304 FTS: 532-7304
EDUCATION:
B.S., Iowa State University, 1972, Chemistry
Ph.D., University of Illinois, 1977, Physical Chemistry

Butcher, Barry M.

Supervisor
U.S. Department of Energy
Sandia Laboratories
Geomechanics Division 5532
Albuquerque, NM 87185
PHONE: 505/264-1300 FTS: 475-1300
EDUCATION:
B.E., Yale University, 1955, Civil Engineering
Ph.D., Cornell University, 1962

Butler, Jackie D.

Professor
Colorado State University
College of Agriculture
Department of Horticulture
Fort Collins, CO 80523
PHONE: 303/491-7070
EDUCATION:
B.S., University of Illinois, 1957, Agriculture Education
M.S., University of Illinois, 1961, Horticulture
Ph.D., University of Illinois, 1966, Turf Grass Science

Campbell, John H.

U.S. Department of Energy
Lawrence Livermore Laboratory
P.O. Box 808
Livermore, CA 94550
PHONE: 415/422-7303 FTS: 532-7303
EDUCATION:
Ph.D., University of Illinois, 1975, Physical Chemistry

Carley, James F.

Mechanical Engineer
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6601 FTS: 532-6601
EDUCATION:
B.S., Cornell University, 1944, Chemical Engineering
B.Ch.E., Cornell University, 1947, Chemical Engineering
Ph.D., Cornell University, 1951, Chemical Engineering

Cashion, William

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Chemical Resources Branch
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-4869
EDUCATION:
B.S., University of New Mexico, 1949, Geology

Cattany, Ronald W.

Director
State of Colorado
Energy Conservation Office
Policy and Planning Division
1600 Downing, Suite 200
Denver, CO 80218
PHONE: 303/839-2507
EDUCATION:
B.S., Colorado School of Mines, 1975, Mineral Engineering/Mathematics
M.S., Colorado School of Mines, 1976, Mineral Economics

Caudle, Rodney

Chief
U.S. Department of Energy
Carbondale Mining Technology Center
Surface Coal Mining Branch
P.O. Box 2587
Carbondale, IL 62901
PHONE: 618/985-3771
EDUCATION:
B.S., University of Illinois, 1950, Mining Engineering
M.S., University of Illinois, 1952, Mining Engineering

Cawley, William A.

Deputy Director
U.S. Environmental Protection Agency
Industrial Environmental Research
Laboratory-Cincinnati
26 West St. Clair Street
Cincinnati, OH 45268
PHONE: 513/684-4438 FTS: 684-4438
EDUCATION:
A.B., Harvard University, 1946, Natural Sciences
B.S., Tufts University, 1950, Civil Engineering
M.S., Massachusetts Institute of Technology, 1955, Sanitary Engineering

Chang, Nien-Yin

Assistant Professor
University of Colorado at Denver
Department of Civil and Urban Engineering
1100 14th Street
Denver, CO 80202
PHONE: 303/629-2810
EDUCATION:
B.S., Chung-Hsing University, 1965, Civil Engineering
M.S., National Taiwan University, 1967, Civil Engineering
Ph.D., Ohio State University, 1976, Civil Engineering

Chappell, Willard R.

Director, DOE Oil Shale Task Force
University of Colorado
Department of Chemistry
Campus Box 215
Boulder, CO 80309
PHONE: 303/492-7588
EDUCATION:
B.A., University of Colorado, 1962
M.A., Harvard University, 1963
Ph.D., University of Colorado, 1965

Chester, Stephen

Group Leader
U.S. Department of Commerce
U.S. National Bureau of Standards
Building 222, Room A113
Washington, DC 20234
PHONE: 301/921-2153 FTS: 921-2153
EDUCATION:
B.S., University of California-Los Angeles, 1966, Chemistry
Ph.D., University of Illinois, 1970

Chong, Kenneth

Professor
University of Wyoming
College of Engineering
Department of Civil Engineering
Laramie, WY 82071
PHONE: 307/766-3322
EDUCATION:
M.S., University of Massachusetts, 1966
M.S.E., Princeton University, 1968
Ph.D., Princeton University, 1969, Civil Engineering

Christiansen, David E.

Chemical Engineer
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6447 FTS: 532-6447
EDUCATION:
B.S., University of Utah, 1962, Chemical Engineering
M.A., Princeton University, 1964, Chemical Engineering
Ph.D., Princeton University, 1967, Chemical Engineering

Christianson, Alden G.

U.S. Environmental Protection Agency
Industrial Environmental Research
Laboratory-Cincinnati
5555 Ridge Avenue
Cincinnati, OH 45268
PHONE: 513/684-4247 FTS: 684-4247
EDUCATION:
B.S., University of Minnesota, 1961, Civil Engineering

Clark, Bruce R.

Research Staff Member
U.S. Department of Energy
Oak Ridge National Laboratory
Building 4500G, Room E-160
P.O. Box X
Oak Ridge, TN 37830
PHONE: 615/574-4861 FTS: 624-4861
EDUCATION:
B.A., Park College, 1963
M.S., Stanford University, 1964
Ph. D., University of Wisconsin, 1974

Coffin, V.M.D., David L.

Senior Science Advisor
U.S. Environmental Protection Agency
Office of Research and Development
Health Effects Research Laboratory
MS-70
Research Triangle Park, NC 27711
PHONE: 919/541-2585 FTS: 629-2585
EDUCATION:
V.M.D., University of Pennsylvania, 1938

Collier, L. W. (Bill)

Superintendent
U.S. Department of Interior
Bureau of Indian Affairs
Uinta and Ouray Agency
Fort Duchesne, UT 84026
PHONE: 801/722-2406x210
EDUCATION:
B.A., Northeastern University, 1967, History

Collins, Dannie L.

Sub-district Chief
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
P.O. Box 2027
Grand Junction, CO 81501
PHONE: 303/245-5257
EDUCATION:
B.S., Colorado State University, 1961, Architectural Engineering
M.S., Washington State University, 1963, Architectural Engineering

Cook, Wayne

Professor and Department Head
Colorado State University
Department of Range Science
Fort Collins, CO 80523
PHONE: 303/491-6620
EDUCATION:
B.S., Kansas State University, 1940, Botany/Ecology
M.S., Utah State University, 1942, Range Science
Ph.D., Texas A & M University, 1952, Range Science

Cornish, Rodney H.

Associate Director
University of Denver
Denver Research Institute
Director's Office
Denver, CO 80208
PHONE: 303/753-2271
EDUCATION:
B.E.P., Cornell University, 1954, Engineering Physics
Ph.D., Cornell University, 1961, Engineering Physics

Cortese, Charles

Associate Professor
University of Denver
Department of Sociology
Denver, CO 80208
PHONE: 303/753-3275
EDUCATION:
B.A., University of Denver, 1962, Liberal Arts
M.A., University of Denver, 1966, Sociology
Ph.D., Brown University, 1974, Sociology

Costello, Joseph

Statistician
U.S. Public Health Service
National Institute for Occupational Safety and Health
Division of Respiratory Disease Studies
Epidemiological Investigations Branch
Center for Disease Control
944 Chestnut Ridge Road
Morgantown, WV 26505
PHONE: 304/599-7476 FTS: 923-7476
EDUCATION:
B.S., University of Vermont, 1956, Agriculture
M.S., Louisiana State University, 1958, Genetics
Sp.D., Edinburgh, 1959, Genetics

Costin, Laurence S.

Technical Staff Member
U.S. Department of Energy
Sandia Laboratories
Geomechanics Division 5532
Albuquerque, NM 87185
PHONE: 505/264-6829 FTS: 475-6829
EDUCATION:
A.B.Sc.B., Brown University, 1971
Sc.M., Brown University, 1976
Ph.D., Brown University, 1978

Coulombe, Harry N.

Program Design Specialist
U.S. Department of Interior
U.S. Fish and Wildlife Service
Western Energy and Land Use Team
2625 Redwing Road
Fort Collins, CO 80526
PHONE: 303/223-2040 FTS: 323-5283
EDUCATION:
B.A., University of California-Los Angeles, 1962
M.A., University of California-Los Angeles, 1965
Ph.D., University of California-Los Angeles, 1968

Council, Clarence

Staff Engineer
U.S. Department of Energy
Regional Office
Assessment and Integration
1075 South Yukon Street
Lakewood, CO 80226
PHONE: 303/234-2472 FTS: 234-2472
EDUCATION:
B.S., Texas A & M University, 1961, Mechanical Engineering
M.S., Texas A & M University, 1964, Industrial Engineering

Covay, Kenneth J.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
P.O. Box 810
Meeker, CO 81641
PHONE: 303/878-5086
EDUCATION:
B.S., Northern Illinois University, 1966, Geology and Earth Science

Crowl, Daniel A.

Assistant Professor
Wayne State University
Department of Chemical Engineering
5050 Anthony Wayne Drive
Detroit, MI 48202
PHONE: 313/577-3874
EDUCATION:
B.S., Pennsylvania State University, 1971
M.S., University of Illinois, 1973
Ph.D., University of Illinois, 1975

Culbertson, William J.

Research Engineer
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.S., University of Denver, 1948, Chemical Engineering
M.S., University of Denver, 1953, Chemical Engineering

Curlin, James W.

Deputy Assistant Secretary
U.S. Department of Interior
Office of the Assistant Secretary for Land and Water Resources
18th & E Streets, N.W.
Washington, DC 20240
PHONE: 202/343-6734 FTS: 343-6734
EDUCATION:
B.S., University of Arkansas, 1954, Forestry
M.S., Louisiana State University, 1959, Soils Science
Ph.D., Louisiana State University, 1964, Soils Science
J.D., University of Tennessee, 1972, Law

Curnutt, Rocky

Surface Reclamation Specialist
U.S. Department of Interior
Bureau of Land Management
White River Resource Area
P.O. Box 928
Meeker, CO 81641
PHONE: 303/878-5084
EDUCATION:
B.Sc., Washington State University, 1976, Range Management

Dana, Peter

Geologist
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2320
EDUCATION:
B.S., University of Oklahoma, 1952, Geology
M.S., University of Oklahoma, 1954, Geology

Daniels, Jeffrey I.

Environmental Scientist
U.S. Department of Energy
Lawrence Livermore Laboratory
Environmental Sciences Division
P.O. Box 5507, L-453
Livermore, CA 94550
PHONE: 415/422-0910 FTS: 532-0910
EDUCATION:
B.A., University of California-Los Angeles, 1974, Biology
M.S., California State University, 1978, Biology

David, Elanor L.

Executive Assistant
U.S. Department of Interior
Oil Shale Task Force
Office of the Secretary
Denver Federal Center
Building 67, Room 690
Denver, CO 80225
PHONE: 303/234-3275 FTS: 234-3275

Davis, Alten B.

Professor
Weber State College
Department of Political Science
Ogden, UT 84408
PHONE: 801/626-6696
EDUCATION:
B.S., Utah State University, 1943, Political Science
M.S., University of California-Berkeley, 1951, Political Science
Ph.D., University of California-Berkeley, 1962, Political Science

Davis, George H.

Assistant Director
U.S. Department of Interior
U.S. Geological Survey
Resource Programs Coordination
Reston, VA 22092
PHONE: 703/860-7481 FTS: 928-7481
EDUCATION:
B.S., University of Illinois, 1942, Geology

Davis, Grant

Associate Program Manager
U.S. Department of Agriculture
Forest Service
Surface Environment and Mining
P.O. Box 2556
Billings, MT 59103
PHONE: 406/657-6361 FTS: 585-6361
EDUCATION:
B.S., Pennsylvania State University, 1949, Forestry
M.S., Pennsylvania State University, 1951, Wildlife Management

Davis, Ruth M.

Assistant Secretary
U.S. Department of Energy
Office of Resource Applications
12th & Pennsylvania, N.W.
Room 3400
Washington, DC 20461
PHONE: 202/633-9222 FTS: 633-9222
EDUCATION:
B.A., American University, 1950, Mathematics/Physics/Economics
M.A., University of Maryland, 1952, Mathematics/Physics
Ph.D., University of Maryland, 1955, Applied Mathematics/Physics

Davis, William E.

Senior Analyst
Congress of the United States
Office of Technology Assessment
Materials Program
600 Pennsylvania Avenue, S.E.
Washington, DC 20510
PHONE: 202/225-9035
EDUCATION:
A.B., Princeton University, 1951, Sociology
Ph.D., University of Denver, 1959, Psychology

Dean, Walter E.

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Branch of Regional Geochemistry
Denver Federal Center
MS-925
Denver, CO 80225
PHONE: 303/234-2310 FTS: 234-2310
EDUCATION:
A.B., Syracuse University, 1961, Geology
M.S., University of New Mexico, 1964, Geology
Ph.D., University of New Mexico, 1967, Geology

Decora, Andrew W.

Director
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2212 FTS: 328-4212
EDUCATION:
B.S., University of Wyoming, 1950, Chemistry
M.S., University of Wyoming, 1957, Chemistry
Ph.D., University of Wyoming, 1962, Chemistry

Demou, Sam

Physicist
U.S. Department of Interior
Bureau of Mines
Twin Cities Research Center
P.O. Box 1660
Twin Cities, MN 55111
PHONE: 612/725-4574 FTS: 725-4574
EDUCATION:
B.A., Saint Ambrose College, 1963, Physics

de Nevers, Noel

Professor
University of Utah
Department of Chemical Engineering
Salt Lake City, UT 84112
PHONE: 801/581-6024
EDUCATION:
B.S., Stanford University, 1954

Denny, Dale A.

Chief
U.S. Environmental Protection Agency
Office of Research and Development
Energy Assessment and Control Division
Chemical Processes Branch
MS-61
Research Triangle Park, NC 27711
PHONE: 919/541-2825 FTS: 629-2825
EDUCATION:
B.Ch.E., Ohio State University, 1960
M.Sc., Ohio State University, 1961
Ph.D., Ohio State University, 1966

Desborough, George A.

Senior Research Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Central Mineral Resources Branch
Denver Federal Center
MS-910
Denver, CO 80225
PHONE: 303/234-3544 FTS: 234-3544
EDUCATION:
B.A., Southern Illinois University, 1959, Geology/Geography
M.A., Southern Illinois University, 1960, Geology
Ph.D., University of Wisconsin, 1966, Geology

Devine, Michael

Director of Science and Public Policy Program
University of Oklahoma
601 Elm, Room 431
Norman, OK 73019
PHONE: 405/325-2554
EDUCATION:
B.A., University of Texas, 1966, Physics
Ph.D., University of Texas, 1969, Operations Research

Dial, Clyde J.

Director
U.S. Environmental Protection Agency
Industrial Environmental Research
Laboratory-Cincinnati
Energy Systems Environmental
Control Division
5555 Ridge Avenue
Cincinnati, OH 45628
PHONE: 513/684-4207 FTS: 684-4207
EDUCATION:
C.E., University of Cincinnati, 1963, Civil Engineering
M.S., University of Michigan, 1967, Civil Engineering
M.B.A., Xavier University, 1976, Finance

Dickson, Frank

State Conservationist
U.S. Department of Agriculture
Soil Conservation Service
P.O. Box 2440
Casper, WY 82602
PHONE: 307/265-5550x5201 FTS: 328-5201
EDUCATION:
B.S., California State Polytechnic University, 1961, Soils Science
M.R.A., University of Montana, 1972, Resource Administration

Dickson, Philip F.

Professor and Department Head
Colorado School of Mines
Department of Chemical and Petroleum
Refining Engineering
Golden, CO 80401
PHONE: 303/279-0300x728
EDUCATION:
B.S., South Dakota School of Mines, 1958, Chemical Engineering
Ph.D., University of Minnesota, 1962, Chemical Engineering

Dietz, Donald R.

Oil Shale Coordinator
U.S. Department of Interior
U.S. Fish and Wildlife Service
Region VI
Office of Biological Sciences
Area Oil Shale Office
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
B.S., Texas A & M, 1950, Agriculture
M.S., Colorado State University, 1958, Game Management
Ph.D., Colorado State University, 1967, Wildlife Biology

Dildine, Evan D.

Technical Secretary
State of Colorado
Colorado Department of Health
Water Quality Control Division
4210 East 11th Avenue
Denver, CO 80220
PHONE: 303/320-8333x3378
EDUCATION:
B.S., Kansas State University, 1947, Civil Engineering

Dinehart, William K.

Director
State of Utah
Division of State Lands
231 East 400 South, Room 411
Salt Lake City, UT 84111
PHONE: 801/533-5381
EDUCATION:
B.S., University of Maryland, 1972
B.S., Brigham Young University, 1974

Dionne, Jane

Environmental Policy Analyst
U.S. Department of Energy
Policy and Evaluation
Office of Coal and Synthetic Fuels
1000 Independence Avenue, S.W.
Washington, DC 20585
PHONE: 202/252-4346 FTS: 252-4346
EDUCATION:
B.A., University of Connecticut, 1968, Geology
M.A., George Washington University, 1974, Geology/Paleobiology
Ph.D., George Washington University, 1979, Coal Geology

Dittberner, Phillip L.

Plant Ecologist
U.S. Department of Interior
U.S. Fish and Wildlife Service
Western Energy and Land Use Team
2625 Redwing Road
Fort Collins, CO 80526
PHONE: 303/223-2040 FTS: 323-5287
EDUCATION:
B.S., West Texas State University, 1967, Agronomy
M.S., New Mexico State University, 1971, Range Science
Ph.D., Colorado State University, 1973, Range Ecology

Docktor, Leroy

Section Supervisor
U.S. Department of Energy
Laramie Energy Technology Center
Chemical Kinetics and Fluid Dynamics
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2351 FTS: 328-4351
EDUCATION:
B.S., University of North Dakota, 1959, Chemical Engineering
M.S., University of North Dakota, 1969, Chemical Engineering

Donnell, John

Chief, Oil Shale Section
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Chemical Resources Branch
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-3714 FTS: 234-3714
EDUCATION:
B.S., University of Alabama, 1942, Geology

Dudley, Jr., William W.

District Chief
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
2120 Capitol Avenue
Cheyenne, WY 82001
PHONE: 307/778-2220
EDUCATION:
B.S.E., Princeton University, 1960, Geological Engineering
M.S., University of Illinois, 1962, Geology
Ph.D., University of Illinois, 1967, Geology

Durand, Dick

Industrial Hygienist
U.S. Department of Labor
Mine Safety & Health Administration
Rocky Mountain District
Metal and Non-Metal Mine Health and Safety
P.O. Box 25367
Denver, CO 80225
PHONE: 303/234-3421
EDUCATION:
B.S., University of Colorado, 1957, Chemical Engineering

Durham, Jack L.

Chief
U.S. Environmental Protection Agency
Office of Research and Development
Environmental Sciences Research Lab
Aerosol Research Branch
MS-57
Research Triangle Park, NC 27711
PHONE: 919/541-2183 FTS: 629-2183
EDUCATION:
B.S., University of Texas, 1963, Chemistry
M.S., University of Texas, 1965, Physical Chemistry
Ph.D., University of New Brunswick, 1969, Physical Chemistry

Dutcher, Lee C.

Energy Studies Coordinator
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
Central Division
Denver Federal Center
Building 25, MS-406
Denver, CO 80225
PHONE: 303/234-3661
EDUCATION:
B.S., University of Wyoming, 1950, Pre-med
M.S., Colorado State University, 1952, Physical Biology
Ph.D., University of Wisconsin, 1955, Geology

Dyni, John

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Chemical Resources Branch
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-2426
EDUCATION:
B.S., Wayne State University, 1953, Geology
M.S., University of Illinois, 1955, Geology

Echols, James

Program Leader
Colorado State University
Department of Agronomy
Plant Science Building, Room C3
Fort Collins, CO 80523
PHONE: 303/491-6201
EDUCATION:
B.S., Oklahoma State University, 1953, Agronomy
M.S., Oklahoma State University, 1964, Agronomy

Edmonds, Carol

State Representative
State of Colorado
Colorado House of Representatives
3154 Lakeside Drive, #304
Grand Junction, CO 81501
PHONE: 303/839-3006
EDUCATION:
B.A., University of Colorado, 1969, Political Science
M.S., Columbia University, 1970, Journalism

Epler, James L.

Unit Leader
U.S. Department of Energy
Oak Ridge National Laboratory
Biology Division
Mutagenesis & Teratogenesis
Comparative Mutagenesis
P.O. Box Y
Oak Ridge, TN 37830
PHONE: 615/574-0841 FTS: 624-0840
EDUCATION:
B.S., Millersville State College, 1959, Science/Mathematics
M.S., Florida State University, 1962, Genetics
Ph.D., Florida State University, 1963, Genetics

Ettinger, Harry J.

Associate Group Leader for Research
U.S. Department of Energy
Los Alamos Scientific Laboratory
Industrial Hygiene Division
P.O. Box 1663
Los Alamos, NM 87545
PHONE: 505/667-5231 FTS: 843-5231
EDUCATION:
B.C.E., City College of New York, 1956, Civil Engineering
M.C.E., New York University, 1958, Civil Engineering

Farrier, David G.

U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2274 FTS: 328-4274
EDUCATION:
B.Sc., Virginia Polytechnic Institute, 1965
Ph.D., Duke University, 1968

Feder, Gerald L.

Research Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
Denver Federal Center
MS-413
Denver, CO 80225
PHONE: 303/234-2404 FTS: 234-2404
EDUCATION:
B.S., City College of New York, 1960, Geology
M.S., University of Tennessee, 1963, Geology
Ph.D., University of Missouri, 1972, Geology

Feight, Cleon E.

Director
State of Utah
Department of Natural Resources
Oil, Gas, and Mining Division
1588 West North Temple
Salt Lake City, UT 84116
PHONE: 801/533-5771
EDUCATION:
B.A., University of California-Los Angeles, 1947, Political Science
J.D., University of Southern California, 1950, Law

Ferguson, Robert B.

Range Scientist
U.S. Department of Agriculture
Forest Service
Intermountain Forest and Range Experiment Station
Shrub Sciences Laboratories
735 North 500 East
Provo, UT 84601
PHONE: 801/377-5717 FTS: 584-0218
EDUCATION:
B.S., West Virginia University, 1953, Forestry
M.S., Utah State University, 1955, Wildlife Management

Fischer, Roland C.

Secretary-Engineer
State of Colorado
Colorado River Water Conservation District
P.O. Box 1120
Glenwood Springs, CO 81601
PHONE: 303/945-8522
EDUCATION:
B.Sc., Ohio State University, Engineering
M.Sc., Ohio State University, 1955, Engineering

Fish, Richard H.

Staff Scientist
U.S. Department of Energy
Lawrence Berkeley Laboratory
Energy and Environment Division
University of California
Berkeley, CA 94720
PHONE: 415/486-4850 FTS: 451-4850
EDUCATION:
B.S., University of Rhode Island, 1961, Chemistry
Ph.D., University of New Hampshire, 1965, Organic Chemistry

Fox, Douglas G.

Project Leader
U.S. Department of Agriculture
Forest Service
Rocky Mountain Forest and Range Experiment Station
240 West Prospect Street
Fort Collins, CO 80526
PHONE: 303/323-1254 FTS: 323-1254
EDUCATION:
B.Sc., Cooper Union
Ph.D., Princeton University

Fox, Phyllis

Manager Oil Shale Program
U.S. Department of Energy
Lawrence Berkeley Laboratory
University of California
Berkeley, CA 94720
PHONE: 415/486-6698 FTS: 451-6698
EDUCATION:
B.S., University of Florida, 1971, Physics
M.S., University of California-Berkeley, 1975, Environmental Engineering
Ph.D., University of California-Berkeley, 1979, Environmental Engineering

Franklin, Ralph

Environmental R&D Coordinator for Oil Shale
U.S. Department of Energy
Office of Environment
Office of Health and Environmental Research
E-201
Washington, DC 20545
PHONE: 301/353-4904 FTS: 233-4904
EDUCATION:
B.S., University of Arkansas, 1955
M.S., University of Arkansas, 1956
Ph.D., Ohio State University, 1961

Frietsch, III, William

Director
U.S. Environmental Protection Agency
Office of Research and Development
Office of Environmental Processes and Effects Research
Energy and Air Division
RD-682
Washington, DC 20460
PHONE: 202/426-3974 FTS: 426-3974
EDUCATION:
B.A., University of Cincinnati, 1960, Marketing
M.B.A., Xavier University, 1965, Management

Frischknecht, Neil C.

Team Leader
U.S. Department of Agriculture
Forest Service
Intermountain Forest and Range Experiment Station
Shrub Sciences Laboratories
735 North 500 East
Provo, UT 84601
PHONE: 801/377-5717 FTS: 584-0218
EDUCATION:
B.S., Utah State University, 1943, Range Management
M.S., Utah State University, 1949, Range Management
Ph.D., Brigham Young University, 1968, Botany

Fruchter, Jonathan

Manager
U.S. Department of Energy
Pacific Northwest Laboratories
Physical Sciences Department
Earth and Planetary Chemistry Section
Battelle Boulevard
Richland, WA 99352
PHONE: 509/942-3937 FTS: 444-3937
EDUCATION:
B.S., University of Texas, 1966, Chemistry
Ph.D., University of California-San Diego, 1971, Geochemistry

Gala, Kishor

Research Scientist
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.S., University of Bombay, 1969, Chemistry
M.S., State University of New York, 1973, Chemistry
Ph.D., University of Denver, 1980, Chemistry

Gale, Barry G.

Acting Director
U.S. Department of Energy
Office of Resource Applications
Division of Oil Shale Programs
12th & Pennsylvania, N.W.
Washington, DC 20461
PHONE: 202/633-8660 FTS: 633-8660
EDUCATION:
B.A., Northwestern University, 1963
M.A., University of Chicago, 1965
Ph.D., University of Chicago, 1979

Gale, Charles

Research Chemist
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.A., University of Colorado, 1972, Chemistry

Galli, Alfred A.

Environmental Scientist
U.S. Environmental Protection Agency
Office of Research and Development
Office of Environmental Processes and Effects Research
Energy and Air Division
RD-682
Washington, DC 20460
PHONE: 202/426-0288 FTS: 426-0288
EDUCATION:
B.S., West Virginia University, 1967, Geology
M.S., West Virginia University, 1970, Engineering (Sanitary)

Galloway, Terry R.

Chemical Engineer
U.S. Department of Energy
Lawrence Livermore Laboratory
P.O. Box 808, L-365
Livermore, CA 94550
PHONE: 415/422-6456 FTS: 532-6456
EDUCATION:
Ph.D., California Institute of Technology, 1967, Chemical Engineering

Garbe, Yvonne M.

Environmental Engineer
U.S. Environmental Protection Agency
Office of Water and Waste Management
Office of Solid Waste
401 M Street, S.W.
WH-565
Washington, DC 20460
PHONE: 202/755-9190 FTS: 755-9190
EDUCATION:
B.S., Wayne State University, 1964
M.S., University of Cincinnati, 1972

Garr, John M.

Assistant Minority Whip
State of Utah
Legislative District 70
P.O. Box 1637
Price, UT 84501
PHONE: 801/637-2185
EDUCATION:
B.S., Utah State University, 1951, Clinical Psychology
M.S., Utah State University, 1954, Psychology/Career Guidance

Garrett, Pauline (Polly)

Oil Shale Coordinator in Grants Management
U.S. Department of Energy
Regional Office
Assessment and Integration
1075 South Yukon Street
Lakewood, CO 80226
PHONE: 303/234-2472 FTS: 234-2472
EDUCATION:
Ed.D., University of Missouri, 1958

Gary, James H.

Professor
Colorado School of Mines
Department of Chemical and Petroleum Refining Engineering
Golden, CO 80401
PHONE: 303/279-0300x2950
EDUCATION:
B.S., Virginia Polytechnic Institute, 1942, Chemical Engineering
M.S., Virginia Polytechnic Institute, 1946, Chemical Engineering
Ph.D., University of Florida, 1951, Chemical Engineering

Gehrers, Carl

Research Ecologist
U.S. Department of Energy
Oak Ridge National Laboratory
Environmental Sciences
Advanced Fossil Energy Programs
P.O. Box X
Oak Ridge, TN 37830
PHONE: 615/574-7359 FTS: 624-7359
EDUCATION:
B.S., Concordia Teachers College, 1963, Psychology/Education
M.S., Kansas State Teachers College, 1964, Biology
Ph.D., University of Oklahoma, 1972, Aquatic Ecology

Gilmore, Donald B.

Program Analyst
U.S. Environmental Protection Agency
Environmental Monitoring and Support Laboratory
P.O. Box 15027
Las Vegas, NV 89114
PHONE: 702/736-2969 FTS: 595-2969
EDUCATION:
B.S., University of Oklahoma, 1949, Geology

Gilmore, John S.

Senior Research Fellow
University of Denver
Denver Research Institute
Industrial Economics Division
Denver, CO 80208
PHONE: 303/753-3207
EDUCATION:
B.A., Colorado College, 1945, Political Science
M.A., University of Denver, 1964, Economics

Girvin, Donald

U.S. Department of Energy
Lawrence Berkeley Laboratory
University of California
Berkeley, CA 94720
PHONE: 415/486-5931 FTS: 451-5931
EDUCATION:
B.A., University of California-Berkeley, 1965, Physics
M.S., University of California-Berkeley, 1967, Physics
Ph.D., University of California-Berkeley, 1971, Physics

Goddard, Kimball E.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
P.O. Box 2027
Grand Junction, CO 81501
PHONE: 303/245-5257 FTS: 322-0302
EDUCATION:
B.S., Pennsylvania State University, 1972, Geochemistry

Goldberg, Arnold J.

Chief
U.S. Department of Energy
Office of Environment
Fossil Technology Branch
Washington, DC 20545
PHONE: 301/353-4406
EDUCATION:
B.A., Columbia College, 1961, Liberal Arts
B.S., Columbia University, 1962, Chemical Engineering
Ph.D., University of Minnesota, 1966, Chemical Engineering

Goldstein, Gerald

U.S. Department of Energy
Office of Environment
Office of Health & Environmental Research
Division of Pollutant Characterization and Safety Research
E-201
Washington, DC 20545
PHONE: 301/353-5348 FTS: 233-5348
EDUCATION:
Ph.D., University of Tennessee, 1965

Golomb, Dan

Manager
U.S. Environmental Protection Agency
Office of Research and Development
Atmospheric Transport of Energy Pollutants Research Program
RD-682
Washington, DC 20460
PHONE: 202/426-0264 FTS: 426-0264
EDUCATION:
Ph.D., Hebrew University, 1958

Goode, Bill

Project Manager
U.S. Department of Energy
Naval Petroleum & Oil Shale Reserves
Federal Building, Room 3344
Washington, DC 20461
PHONE: 202/633-8656
EDUCATION:
B.S., University of California-Davis, 1968, Soils
M.S., Washington State University, 1972, Environmental Engineering

Goodier, John T.

Chief
State of Wyoming
Department of Economic Planning and Development
Mineral Development Division
Barrett Building
Cheyenne, WY 82002
PHONE: 307/777-7284
EDUCATION:
B.S., Colorado State University, 1959, Geology

Gottlieb, Myron

Branch Chief
U.S. Department of Energy
Office of Environment
Office of Environmental Compliance and Overview
Environmental Control Technology
E-201
Washington, DC 20545
PHONE: 301/353-5587 FTS: 233-5587
EDUCATION:
B.S., Drexel Institute of Technology, 1963, Chemical Engineering
Ph.D., University of Maryland, 1969, Chemical Engineering

Grady, Dennis E.

Research Scientist
U.S. Department of Energy
Sandia Laboratories
Geomechanics Division 5532
Albuquerque, NM 87185
PHONE: 505/264-1212 FTS: 475-1212
EDUCATION:
Ph.D., Washington State University, 1971

Graff, Greg J.

Environmental Coordinator
U.S. Department of Interior
Bureau of Land Management
Branch of Environment
1600 Broadway, Room 700
Denver, CO 80202
PHONE: 303/837-3515
EDUCATION:
B.A., Metropolitan State College, 1974, Political Science/History
M.S., University of Colorado, 1980, Urban and Regional Planning

Gravatt, C. C.

Chief
U.S. Department of Commerce
U.S. National Bureau of Standards
Office of Environmental Measurements
Chemistry Building, A347
Washington, DC 20234
PHONE: 301/921-3775 FTS: 921-3775
EDUCATION:
Ph.D., Duke University, 1966

Gray, S. Lee

Colorado State University
Department of Economics
Fort Collins, CO 80523
PHONE: 303/491-6948
EDUCATION:
B.S., Colorado State University, 1963, Business Administration
M.S., Colorado State University, 1965, Economics
Ph.D., Washington State University, 1970, Agricultural Economics

Gregory, William P.

Research Engineer
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.S., Princeton University, 1952, Chemical Engineering

Griest, Wayne H.

Task Leader
U.S. Department of Energy
Oak Ridge National Laboratory
Building 4500S, Room E-160
P.O. Box X
Oak Ridge, TN 37830
PHONE: 615/574-4868 FTS: 624-4868
EDUCATION:
Ph.D., Vanderbilt University, 1974

Grua, Charles

Environmental Control Specialist
U.S. Department of Energy
Office of Environment
Office of Environmental Compliance and Overview
E-201
Washington, DC 20545
PHONE: 301/353-5516 FTS: 233-5516
EDUCATION:
B.S., U.S. Merchant Marine Academy, 1957, Marine Engineering

Guerin, Michael R.

Section Head
U.S. Department of Energy
Oak Ridge National Laboratory
Bio/Organic Analysis
Analytical Chemistry Division
Building 4500S, Room E-160
P.O. Box X
Oak Ridge, TN 37830
PHONE: 615/574-4862 FTS: 624-4862
EDUCATION:
B.S., Northern Illinois University, 1963
Ph.D., Iowa State University, 1967

Gunter, Bobby J.

Regional Industrial Hygienist
U.S. Public Health Service
National Institute of Occupational Safety and Health
1941 Stout Street
Denver, CO 80294
PHONE: 303/837-3970
EDUCATION:
B.A., Southeastern State College, 1963, Chemistry
M.S., University of Oklahoma, 1964, Public Health
Ph.D., University of Oklahoma, 1967, Preventative Medicine

Habenicht, Charles H.

Research Specialist
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.S., University of Colorado, 1976, Environmental Biology

Hager, James W.

Deputy Area Oil Shale Supervisor
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
Conservation Division
131 North 6th Street
Grand Junction, CO 81501
PHONE: 303/245-6700
EDUCATION:
B.S., University of Nevada, 1950, Mining Engineering

Hail, William

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Chemical Resources Branch
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-2787
EDUCATION:
B.A., College of Wooster, 1943, Geology
M.A., Washington University, 1951, Geology

Haines, William E.

Manager
U.S. Department of Energy
Laramie Energy Technology Center
Division of Physical Sciences
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2327 FTS: 328-4327
EDUCATION:
B.S., University of Wyoming, 1939, Chemistry

Halow, Mary

Director
U.S. Department of Energy
Office of Resource Applications
Division of Program Development and Evaluation
12th & Pennsylvania, N.W.
Room 6433
Washington, DC 20461
PHONE: 202/633-8584 FTS: 633-8584
EDUCATION:
B.A., George Washington University, 1956
L.L.B., George Washington University, 1960

Hanson, Ray L.

Research Chemist
U.S. Department of Energy
Inhalation Toxicology Research Institute
P.O. Box 5890
Albuquerque, NM 87115
PHONE: 505/264-4267 FTS: 475-4267
EDUCATION:
Ph.D., University of New Mexico, 1975

Harak, Arnold

Technical Project Officer
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2261 FTS: 328-4261
EDUCATION:
B.S., University of North Dakota, 1956, Chemistry
B.S., University of North Dakota, 1956, Mathematics

Harney, Brian M.

Director
U.S. Department of Energy
Office of Resource Applications
Division of Technology Assessment
12th & Pennsylvania, N.W.
Washington, DC 20461
PHONE: 202/633-8644 FTS: 633-8644
EDUCATION:
B.S., Manhattan College, 1965
Ph.D., University of Pittsburgh, 1970

Harrington, Larry W.

Acting Coordinator
U.S. Department of Energy
Laramie Energy Technology Center
Office of Environment and Conservation
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2251 FTS: 328-4251
EDUCATION:
B.S., University of Wyoming, 1973, Chemical Engineering
J.D., University of Wyoming, 1976, Law

Harris, Eugene F.

Chief
U.S. Environmental Protection Agency
Industrial Environmental Research Laboratory-Cincinnati
Extraction Technology Branch
26 West St. Clair Street
Cincinnati, OH 45268
PHONE: 513/684-4417 FTS: 684-4417
EDUCATION:
B.S., University of Cincinnati, 1961
M.S., University of Cincinnati, 1966

Hartstein, Art

Acting Chief
U.S. Department of Energy
Office of Fossil Energy
Oil Shale Conversion Branch
D-107
Washington, DC 20545
PHONE: 301/353-2760 FTS: 233-2760
EDUCATION:
B.S., Polytechnic Institute of Brooklyn, 1962, Chemistry
Ph.D., Adelphi University, 1970, Physical Chemistry

Hassell, Wendell

Plant Materials Specialist
U.S. Department of Agriculture
Soil Conservation Service
P.O. Box 17107
Denver, CO 80217
PHONE: 303/837-5651 FTS: 327-5651
EDUCATION:
B.S., Utah State University, 1965, Agronomy

Hatch, Frederick T.

Section Leader for Cell Biology and Mutagenesis
U.S. Department of Energy
Lawrence Livermore Laboratory
Biomedical Sciences Division
P.O. Box 5507, L-452
Livermore, CA 94550
PHONE: 415/422-5611 FTS: 532-5611
EDUCATION:
M.D., Harvard University, 1948
Ph.D., Massachusetts Institute of Technology, 1960

Haun, John D.

Professor
Colorado School of Mines
Department of Geology
Golden, CO 80401
PHONE: 303/279-0300x2859
EDUCATION:
B.A., Berea College, 1948, Geology
M.A., University of Wyoming, 1949, Geology
Ph.D., University of Wyoming, 1953, Geology

Hawkins, James E.

Research Geologist
U.S. Department of Interior
Bureau of Mines
Denver Mining Research Center
Denver Federal Center
Building 20
Denver, CO 80225
PHONE: 303/234-3848 FTS: 234-3848
EDUCATION:
B.S., University of Wyoming, 1951

Hayduk, Charles

Oil Shale Projects Leader
U.S. Department of Energy
Carbondale Mining Technology Center
Non-Coal Mining Branch
P.O. Box 2587
Carbondale, IL 62901
PHONE: 618/985-3771
EDUCATION:
B.S., Pennsylvania State University, 1973, Mining Engineering

Hecox, Walter E.

Project Supervisor
State of Colorado
Department of Natural Resources
Executive Director's Office
Colorado Energy Resource Development Plan
1313 Sherman Street, Room 718
Denver, CO 80203
PHONE: 303/839-3311
EDUCATION:
B.A., Colorado College, 1964, Economics
M.A., Syracuse University, 1967, Economics
Ph.D., Syracuse University, 1969, Economics

Henderson, Charles R.

Chairman
Acting Council Director
State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
Uinta Basin Energy Planning and Development Council
Uinta County Building, Room 104
Vernal, UT 84078
PHONE: 801/789-2300

Hendricks, Lloyd J.

Research Associate
Colorado School of Mines
Department of Chemistry and Geochemistry
Golden, CO 80401
PHONE: 303/279-0300x639
EDUCATION:
B.A., Hastings College, 1953, Chemistry/Physics/Mathematics
M.S., University of Illinois, 1956, Physics
Ph.D., University of Colorado, 1975, Chemistry

Hennessey, Jr., Joseph P.

Smoke Management Meteorologist
State of Oregon
Department of Forestry
2600 State Street
Salem, OR 97310
PHONE: 503/378-3744
EDUCATION:
B.S., University of Utah, 1969, Meteorology
M.S., Oregon State University, 1974, Atmospheric Sciences

Hertz, Harry S.

Chief
U.S. Department of Commerce
U.S. National Bureau of Standards
Organic Analytical Research Division
A113 Chemistry
Washington, DC 20234
PHONE: 301/921-3778 FTS: 921-3778
EDUCATION:
B.S., Polytechnic Institute of Brooklyn, 1967
Ph.D., Massachusetts Institute of Technology, 1971

Hessel, Darryl L.

Manager
U.S. Department of Energy
Pacific Northwest Laboratories
Environmental Health and Safety Research Program Office
Technology and Regional Assessment
Battelle Boulevard
Richland, WA 99352
PHONE: 509/375-2156 FTS: 444-7511
EDUCATION:
Ph.D., University of Michigan, 1974, Conservation & Resource Planning

Hill, George Richard

Professor
University of Utah
Department of Chemical Engineering
Salt Lake City, UT 84105
PHONE: 801/581-7547
EDUCATION:
B.A., Brigham Young University, 1942, Chemistry
Ph.D., Cornell University, 1946, Chemistry

Hines, Tony

Associate Professor
Colorado School of Mines
Department of Chemical and Petroleum Refining Engineering
Golden, CO 80401
PHONE: 303/279-0300x722
EDUCATION:
B.S., University of Oklahoma, 1967, Chemical Engineering
M.S., Oklahoma State University, 1969, Chemical Engineering
Ph.D., University of Texas, 1973, Thermal Sciences

Ho, C. -h.

Research Chemist
U.S. Department of Energy
Oak Ridge National Laboratory
Building 4500S, Room E-160
P.O. Box X
Oak Ridge, TN 37830
PHONE: 615/574-4867 FTS: 624-4867
EDUCATION:
Ph.D., University of Bonn, 1971

Hodgson, Alfred T.

U.S. Department of Energy
Lawrence Berkeley Laboratory
University of California
Berkeley, CA 94720
PHONE: 415/486-5009
EDUCATION:
B.A., University of California, 1967, Zoology
M.S., California State University, 1973, Biology

Hoffman, Eric G.

Geologist
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
B.S., Washington State University, 1968, Geology

Holcomb, David J.

Technical Staff Member
U.S. Department of Energy
Sandia Laboratories
Geomechanics Division 5532
Albuquerque, NM 87185
PHONE: 505/264-6829 FTS: 475-6829
EDUCATION:
Ph.D., University of Colorado, 1978

Holland, J. Mike

Senior Scientist
U.S. Department of Energy
Oak Ridge National Laboratory
Biology Division
Comparative Carcinogenesis
P.O. Box Y
Oak Ridge, TN 37830
PHONE: 615/574-0678 FTS: 624-0678
EDUCATION:
B.S., Kansas State University, 1964, Veterinary Medicine
Ph.D., Washington State University, 1970, Experimental Pathology/Biochemistry

Holland, Laurence Martin

Oil Shale Program Manager
U.S. Department of Energy
Los Alamos Scientific Laboratory
Life Sciences Division
P.O. Box 1663, MS-880
Los Alamos, NM 87545
PHONE: 505/667-2747 FTS: 843-2747
EDUCATION:
B.S., Colorado State University, 1955, Biology
D.V.M., Colorado State University, 1958, Veterinary Medicine

Holman, Roger

Energy Economist and Energy Finance Analyst
State of Colorado
Energy Conservation Office
1600 Downing
Denver, CO 80218
PHONE: 303/839-2186
EDUCATION:
B.A., University of Colorado, 1973, Molecular, Cellular & Developmental Biology
M.B.A., University of Denver, 1979, Finance

Holmes, Walter F.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
1745 West 1700 South, Room 1098
Salt Lake City, UT 84104
PHONE: 801/524-5654
EDUCATION:
B.S., Utah State University, 1971, Geology
M.S., Utah State University, 1976, Environmental Engineering

Horino, Frank G.

Project Leader/Geophysicist
U.S. Department of Interior
Bureau of Mines
Denver Mining Research Center
Denver Federal Center
Building 20
Denver, CO 80225
PHONE: 303/234-3765 FTS: 234-3765
EDUCATION:
B.S., Colorado School of Mines, 1944, Geological Engineering
M.S., Colorado School of Mines, 1951, Geological Engineering

House, Peter

Director
U.S. Department of Energy
Office of Environment
Office of Technology Impacts
1000 Independence Avenue, S.W.
Washington, DC 20585
PHONE: 202/252-2061 FTS: 252-2061
EDUCATION:
B.S., American International College, 1957, Economics
M.A., Clark University, 1958, Economics
Ph.D., Cornell University, 1969, Administrative Economics

Howatson, John

Professor
University of Wyoming
Department of Chemistry
Laramie, WY 82071
PHONE: 307/766-4370
EDUCATION:
B.S., University of Washington, 1943, Chemistry
Ph.D., University of Wisconsin, 1950, Chemistry

Huffman, George L.

Acting Chief
U.S. Environmental Protection Agency
Industrial Environmental Research
Laboratory-Cincinnati
Alternate Energy Sources Branch
5555 Ridge Avenue
Cincinnati, OH 45268
PHONE: 513/684-4478 FTS: 684-4478
EDUCATION:
B.E., Vanderbilt University, 1962, Chemical
Engineering

Hunt, Verl F. ("Buz")

Assistant Director
State of Utah
Energy Office
Resources and Environment
231 East 400 South
Salt Lake City, UT 84111
PHONE: 801/533-5424
EDUCATION:
B.A., University of Utah, 1972, Economics

Hurtubise, Robert J.

Associate Professor
University of Wyoming
Department of Chemistry
Laramie, WY 82071
PHONE: 307/766-6241
EDUCATION:
B.S., Xavier University, 1964, Chemistry
M.S., Xavier University, 1966, Chemistry
Ph.D., Ohio University, 1969, Chemistry

Hustrulid, William A.

Professor
Colorado School of Mines
Department of Mining Engineering
Golden, CO 80401
PHONE: 303/279-0300x714
EDUCATION:
B.S., University of Minnesota, 1962, Mining
Engineering
M.S., University of Minnesota, 1965, Mining
Engineering/Rock Mechanics
Ph.D., University of Minnesota, 1968, Mining
Engineering/Rock Mechanics

Hyde, Robert

Professor
Colorado State University
Department of Range Science
Fort Collins, CO 80523
PHONE: 303/491-6543
EDUCATION:
B.S., Fort Hays Kansas State College, 1959,
Botany
M.S., Fort Hays Kansas State College, 1960,
Plant Ecology
Ph.D., University of Wyoming, 1963, Range
Science

Ichord, William

Environmental Protection Specialist
U.S. Department of Energy
Office of Environment
NEPA Affairs Division
1000 Independence Avenue, S.W.
4G-064
Washington, DC 20585
PHONE: 202/252-4610 FTS: 252-4610
EDUCATION:
B.A., Denison University, 1976, Political
Science/Environmental Studies
J.D., Washington University, 1979, Law

Ireland, Robert R.

Aquatic Ecologist
U.S. Department of Energy
Lawrence Livermore Laboratory
P.O. Box 5507
Livermore, CA 94550
PHONE: 415/422-0908 FTS: 532-0908
EDUCATION:
M.S., California State University, 1974

Ischinger, Lee S.

Program Development Staff
U.S. Department of Interior
U.S. Fish and Wildlife Service
Western Energy and Land Use Team
Office of Biologic Sciences
2625 Redwing Road
Fort Collins, CO 80526
PHONE: 303/223-2040 FTS: 323-5287
EDUCATION:
B.S., Northern Illinois University, 1965,
Aquatic Biology
M.S., Northern Illinois University, 1967,
Aquatic Biology

Jackson, Daniel

U.S. Department of Energy
Lawrence Berkeley Laboratory
University of California
Berkeley, CA 94720
PHONE: 415/486-5009
EDUCATION:
B.S., University of California-Berkeley, 1977,
Chemistry

Jacobs, Harold R.

Professor
University of Utah
College of Engineering
Department of Mechanical Engineering
3008 Merrial Engineering Building
Salt Lake City, UT 84112
PHONE: 801/581-7106
EDUCATION:
B.S., University of Portland, 1958, Engineering
M.S.M.E., Washington State University, 1961,
Mechanical Engineering
Ph.D., Ohio State University, 1965, Mechanical
Engineering

Jakobson, Kurt

Senior Staff Engineer
U.S. Environmental Protection Agency
Office of Research and Development
Office of Environmental Engineering and Technology
Energy Processes Division
401 M Street, S.W.
RD-691
Washington, DC 20460
PHONE: 202/755-2737 FTS: 755-2737
EDUCATION:
B.Ch.E., Polytechnic Institute of Brooklyn, 1956, Chemical Engineering

Jaten, Charles E.

Staff Director
U.S. Department of Housing and Urban Development
Regional Administrator's Staff
Mountain Plains Federal Regional Council
1961 Stout Street, Room 1490
Denver, CO 80294
PHONE: 303/837-2741 FTS: 327-2741
EDUCATION:
B.A., American University, 1965, Political Science
M.A., University of Wisconsin, 1970, Urban Affairs

Johnson, Donald R.

Section Supervisor
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2232 FTS: 328-4232
EDUCATION:
B.S., Bethany College, 1955

Johnson, Ronald C.

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Chemical Resources Branch
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-5118
EDUCATION:
B.A., State University of New York, 1972, Geology
M.A., State University of New York, 1974, Geology

Jordon, Charles

Chief Planner
State of Colorado
Department of Local Affairs
Division of Planning
1313 Sherman Street, Room 520
Denver, CO 80203
PHONE: 303/839-2351
EDUCATION:
B.A., U.S. Naval Academy, 1963, Marine Engineering
J.D., University of Denver, 1970, Law

Joseph, Todd M.

Deputy Associate General Counsel
U.S. Environmental Protection Agency
Office of General Counsel
Air, Noise, and Radiation Division
401 M Street, S.W.
Washington, DC 20460
PHONE: 202/755-0763 FTS: 755-0763
EDUCATION:
A.B., Harvard University, 1971, Government
J.D., Harvard University, 1975, Law

Jovanovich, Andy

Senior Research Chemist
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.S., Colorado College, 1965, Chemistry
Ph.D., Northwestern University, 1970, Physical Organic Chemistry
M.B.A., University of Denver, 1974, Marketing and Finance

Joy, Charles E.

Biological Technician
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
Conservation Division
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700
EDUCATION:
B.S., Northwest Nazarene College, 1973, Biological Science

Kash, Don E.

Chief
U.S. Department of Interior
U.S. Geological Survey
Conservation Division
National Center
MS-610
Reston, VA 22092
PHONE: 703/860-7524 FTS: 928-7524
EDUCATION:
B.A., University of Iowa, 1959, Political Science
M.A., University of Iowa, 1960, Political Science
Ph.D., University of Iowa, 1963, Political Science

Katell, Sidney

Research Professor
West Virginia University
College of Mineral and Energy Resources
White Hall
Morgantown, WV 26505
PHONE: 304/293-4207
EDUCATION:
B.S., New York University, 1941, Chemical Engineering

Kathman, David

Range Conservationist
U.S. Department of Interior
Bureau of Land Management
Colorado State Office
Branch of Biological Sciences
1600 Broadway, Room 700
Denver, CO 80202
PHONE: 303/837-3264 FTS: 327-3264
EDUCATION:
B.S., Montana State University, 1959, Range Management

Kealy, Dan

Research Supervisor
U.S. Department of Interior
Bureau of Mines
Spokane Research Center
East 315 Montgomery
Spokane, WA 99207
PHONE: 509/484-1610 FTS: 439-6880
EDUCATION:
B.S., University of Michigan, 1960, Mining Engineering
M.S., University of Idaho, 1970, Mining Engineering
Ph.D., University of Idaho, 1972, Mining Metallurgy

Keighin, William

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Chemical Resources Branch
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-5119
EDUCATION:
B.A., Oberlin College, 1954, Chemistry
M.S., University of Colorado, 1960, Mineralogy
Ph.D., University of Colorado, 1966, Geology

Kilpatrick, Frederick

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
National Center
MS-407
Reston, VA 22092
PHONE: 703/860-6846 FTS: 928-6848
EDUCATION:
B.S., Georgia Institute of Technology, 1953, Civil Engineering
M.S., Georgia Institute of Technology, 1958, Civil Engineering

Kimball, Briant

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
1745 West 1700 South
Salt Lake City, UT 84104
PHONE: 801/524-5654
EDUCATION:
B.A., Harvard University, 1976, Geology
M.S., University of Utah, 1978, Geology

King, Jeannette W.

Research Microbiologist
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.A., Texas Christian University, 1959, Biology

Kinney, Wesley L.

Research Aquatic Biologist
U.S. Environmental Protection Agency
Environmental Monitoring Systems Lab
Integrated Monitoring Systems Branch
P.O. Box 15027
Las Vegas, NV 89114
PHONE: 702/736-2969x353 FTS: 595-2969
EDUCATION:
B.S., Central Michigan University, 1966, Biology
M.S., Central Michigan University, 1968, Aquatic Biology

Kirby, Ron

Civil Engineer
U.S. Environmental Protection Agency
Effluent Guidelines Division
Energy and Mining
401 M Street, S.W.
WH-552
Washington, DC 20460
PHONE: 202/426-7770 FTS: 426-7770
EDUCATION:
B.S., Texas Technological University, 1971, Civil Engineering

Kland, Mathilde J.

U.S. Department of Energy
Lawrence Berkeley Laboratory
University of California
Berkeley, CA 94720
PHONE: 415/486-6526
EDUCATION:
Ph.D., Northwestern University, 1948, Organic Chemistry

Klusman, Ronald W.

Professor
Colorado School of Mines
Department of Chemistry and Geochemistry
Golden, CO 80401
PHONE: 303/279-0300x617
EDUCATION:
B.S., Indiana University, 1964, Chemistry
M.A., Indiana University, 1967, Geology
Ph.D., Indiana University, 1969, Geology

Kozlowski, Richard G.

Director
U.S. Environmental Protection Agency
Office of Enforcement
Office of Mobile Source and Noise Enforcement
Field Operations and Support Division
401 M Street, S.W.
EN-340
Washington, DC 20460
PHONE: 202/472-9360 FTS: 472-9360
EDUCATION:
B.E.S., Johns Hopkins University, 1961, Engineering Sciences
J.D., Catholic University, 1972, Law

Krohlow, Faith

Industrial Hygienist
U.S. Department of Labor
Mine Safety & Health Administration
Denver Technical Support Center
Industrial Health Branch
Dust Group
P.O. Box 25367
Denver, CO 80225
PHONE: 303/234-4824
EDUCATION:
B.S., University of Wisconsin, 1975, Human Biology

Krug, Eugene P.

Program Analyst
U.S. Department of Energy
Office of Environment
Office of Technology Impacts
Division of Policy Analysis
1000 Independence Avenue, S.W.
Washington, DC 20585
PHONE: 202/252-4770 FTS: 252-4770
EDUCATION:
B.S., Cornell University, 1966, Engineering Physics
M.E., Cornell University, 1967, Nuclear Engineering

Ladwig, Lewis R.

Chief
State of Colorado
Department of Natural Resources
Colorado Geological Survey
Mineral Fuel Section
1313 Sherman Street, Room 715
Denver, CO 80203
PHONE: 303/839-2611
EDUCATION:
B.S., University of Idaho, 1953, Geology
B.S., University of Idaho, 1954, Education
M.S., University of Oregon, 1957, Geology

LaHue, Miles D.

Atmospheric Scientist
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
B.S., University of Colorado, 1964

Lailas, Nicholas

Physical Scientist
U.S. Department of Energy
Office of Resource Applications
12th & Pennsylvania, N.W.
MS 3344, Room 6432
Washington, DC 20461
PHONE: 202/633-8644 FTS: 633-8644
EDUCATION:
B.S., University of Miami, 1961, Chemistry
M.S., American University, 1971, Technology in Management

Lamson, Kenneth C.

Environmental Engineer
U.S. Department of Energy
Lawrence Livermore Laboratory
P.O. Box 5507
Livermore, CA 94550
PHONE: 415/422-6845 FTS: 532-6845
EDUCATION:
B.A., University of Connecticut, 1963, Physics
M.S., University of Pittsburgh, 1967, Environmental Engineering

Langenkamp, R. Dobie

Deputy Assistant Secretary
U.S. Department of Energy
Office of Resource Applications
Resource Development and Operations Division
12th & Pennsylvania, N.W.
Room 3426
Washington, DC 20461
PHONE: 202/633-8400 FTS: 633-8400
EDUCATION:
B.A., Stanford University, 1958
J.D., Harvard Law School, 1961

Lanier, W. Steven

Project Officer/Mechanical Engineer
U.S. Environmental Protection Agency
Office of Research and Development
Industrial Environmental Research Lab
Energy Assessment Control Division
Combustion Research Branch
MS-65
Research Triangle Park, NC 27711
PHONE: 919/541-2432 FTS: 629-2432
EDUCATION:
B.S., North Carolina State University, 1966, Aerospace Engineering
M.S., University of Tennessee, 1967, Aerospace Engineering

Lassiter, Ray R.

Chief
U.S. Environmental Protection Agency
Athens Environmental Research Lab
Environmental Systems Branch
College Station Road
Athens, GA 30605
PHONE: 404/546-3103 FTS: 250-3103
EDUCATION:
B.S., North Carolina State College, 1959, Wildlife Biology
M.S., North Carolina State College, 1962, Animal Ecology
Ph.D., North Carolina State University, 1971, Animal Ecology

Lawlor, Dale L.

Senior Research Chemist
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2265 FTS: 328-4265
EDUCATION:
B.S., University of Denver, 1954, Chemistry

Leenheer, Jerry A.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
Denver Federal Center
P.O. Box 25046
MS 407
Denver, CO 80225
PHONE: 303/234-3975 FTS: 234-3975
EDUCATION:
B.S., Calvin College, 1966, Chemistry
M.S., Purdue University, 1968, Soil Science
Ph.D., Purdue University, 1970, Soil Chemistry

Leopold, Estella B.

Director
University of Washington
Quaternary Research Center
Seattle, WA 98195
PHONE: 206/543-1166
EDUCATION:
Ph.B., University of Wisconsin, 1948, Botany
M.S., University of California-Berkeley, 1950, Botany
Ph.D., Yale University, 1955, Botany

Lewis, Arthur E.

Project Leader
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6450 FTS: 532-6450
EDUCATION:
B.S., St. Lawrence University, 1950, Mathematics
M.S., California Institute of Technology, 1955, Geology
Ph.D., California Institute of Technology, 1958, Geology

Lewis, Jr., Cecil D.

Executive Assistant
U.S. Department of Interior
National Park Service
Rocky Mountain Region
655 Parfet
Denver, CO 80225
PHONE: 303/234-2775 FTS: 234-2775
EDUCATION:
B.S., Northern Arizona University, 1960

Lillian, Daniel

Manager
U.S. Department of Energy
Office of Environment
Industrial Hygiene Projects
E-201
Washington, DC 20545
PHONE: 301/353-5617 FTS: 233-5617
EDUCATION:
B.S., Queens College, 1962, Chemistry
M.S., Long Island University, 1966, Chemistry
Ph.D., University of North Carolina, 1969, Air and Industrial Hygiene

Lindsey, Fred

Deputy Division Director
U.S. Environmental Protection Agency
Office of Water and Waste Management
Office of Solid Waste
Hazardous & Industrial Waste Division
401 M Street, S.W.
WH-565
Washington, DC 20460
PHONE: 202/755-9185 FTS: 755-9185
EDUCATION:
B.S., North Carolina State University, 1964, Pulp and Paper Technology

Lindskov, Kenneth L.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
1750 South Redwood Road
Salt Lake City, UT 84104
PHONE: 801/524-5654 FTS: 588-5654
EDUCATION:
B.S., South Dakota State University, 1965, Civil Engineering

Linhart, Yan

Associate Professor
University of Colorado
Department of Biology
Boulder, CO 80309
PHONE: 303/492-8301
EDUCATION:
B.S., Rutgers University, 1961, Agriculture
M.S., Yale University, 1963, Forestry
Ph.D., University of California-Berkeley, 1972, Genetics

Linke, Deborah M.

Environmental Specialist
State of Utah
Water and Power Resources Service
Office of Regional Director
P.O. Box 11568
Salt Lake City, UT 84147
PHONE: 801/524-5463 FTS: 588-5463
EDUCATION:
B.S., Stanford University, 1971, Environmental Science

Little, William E.

Oil Shale Projects Manager
U.S. Department of Energy
Laramie Energy Technology Center
Office of Project Management
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2247 FTS: 328-4247
EDUCATION:
B.S., University of Oklahoma, 1957, Electrical Engineering
M.S., Colorado State University, 1970, Electrical Engineering

Long, Jr., Andrew

Chemist
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2365 FTS: 328-4365
EDUCATION:
B.S., University of Wyoming, 1950, Pharmacy

Long, George

Surface Reclamation Specialist
U.S. Department of Interior
Bureau of Land Management
White River Resource Area
P.O. Box 928
Meeker, CO 81641
PHONE: 303/878-5084
EDUCATION:
B.Sc., Colorado State University, 1978, Range and Forest Management

Lorenson, Burman

Director
Mountain Plains Federal Regional Council
Energy Impact Office
1961 Stout Street
Denver, CO 80202
PHONE: 303/837-2751 FTS: 327-2751

Lowham, Hugh W.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
Hydrologic Study Section
2120 Capitol Avenue
Cheyenne, WY 82001
PHONE: 307/778-2220x2153 FTS: 328-2153
EDUCATION:
B.S., University of Wyoming, 1965, Agricultural Engineering
M.S., Colorado State University, 1979, Civil Engineering

Lukens, Larry A.

Acting Deputy Assistant Secretary
U.S. Department of Energy
Office of Resource Applications
Industrial Planning and Development
12th & Pennsylvania, N.W.
Room 3508
Washington, DC 20461
PHONE: 202/633-8377 FTS: 633-9225
EDUCATION:
B.S./M.S., Purdue University, 1969, Mechanical Engineering
Ph.D., Purdue University, 1971, Mechanical Engineering

Lum, John

Project Officer
U.S. Environmental Protection Agency
Office of Water and Waste Management
Office of Water Planning and Standards
Effluent Guidelines Division
401 M Street, S.W.
WH-552
Washington, DC 20460
PHONE: 202/426-2707 FTS: 426-2707
EDUCATION:
B.E., Cooper Union, 1970, Chemical Engineering
M.S., Massachusetts Institute of Technology, 1972, Chemical Engineering

Madsen, Lowell L.

Assistant Regional Solicitor
U.S. Department of Interior
Solicitors Office
Denver Federal Center
Denver, CO 80225
PHONE: 303/234-6781 FTS: 234-6781
EDUCATION:
B.S., Brigham Young University, 1954, Business Administration/Accounting
J.D., George Washington University, 1962, Law

Malde, Harold E.

Geologist
U.S. Department of Interior
U.S. Geological Survey
Denver Federal Center
P.O. Box 25046
MS 913
Denver, CO 80225
PHONE: 303/234-2864 FTS: 234-2864
EDUCATION:
A.B., Willamette University, 1947

Mallon, Richard G.

Research Physicist
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6602 FTS: 532-6602
EDUCATION:
B.S., University of Missouri, 1951, Electrical Engineering
Ph.D., Rice University, 1966, Solid State Physics

Mangeng, Carolyn A.

U.S. Department of Energy
Los Alamos Scientific Laboratory
Systems Analysis and Assessment Division
Environmental Assessment Group
MS-603
Los Alamos, NM 87545
PHONE: 505/667-3460 FTS: 843-3460
EDUCATION:
B.A., Cornell University, 1970, Government
M.A.T., Northwestern University, 1971, Social Sciences

Mann, John H.

Area Geologist
U.S. Department of Interior
Bureau of Land Management
White River Resource Area
P.O. Box 928
Meeker, CO 81641
PHONE: 303/878-5084
EDUCATION:
B.A., West Georgia College, 1975, Political Science/Geology

Martel, Richard

Supervisor
U.S. Department of Energy
Laramie Energy Technology Center
Division of Engineering
Process Development
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2333
EDUCATION:
B.S., University of Wyoming, 1976, Chemical Engineering

Martin, Joan

Program Manager-Policy
State of Colorado
Colorado Energy Research Institute
2221 East Street
Golden, CO 80401
PHONE: 303/279-2881
EDUCATION:
B.A., Smith College, 1971, Philosophy of Religion
M.S., University of Michigan, 1972, Natural Resource Management

Massey, Dean R.

Supervisor of Reclamation Specialists
State of Colorado
Department of Natural Resources
Division of Mined Land Reclamation
1313 Sherman Street, Room 723
Denver, CO 80203
PHONE: 303/839-3567
EDUCATION:
B.A., Ohio State University, 1974
M.A., University of Colorado, 1977

Mazza, Carl

Chemist
U.S. Environmental Protection Agency
Office of Pesticides and Toxic Substances
Pre-Manufacture Review Division
Technical Support Branch
401 M Street, S.W.
TS-794
Washington, DC 20460
PHONE: 202/426-8815 FTS: 426-8815
EDUCATION:
B.S., Polytechnic Institute of Brooklyn, 1964, Chemistry
Ph.D., Massachusetts Institute of Technology, 1971, Physical Chemistry

McBrumen, Roy

Chief
U.S. Department of Interior
Bureau of Land Management
Branch of Energy and Minerals
1600 Broadway, Room 700
Denver, CO 80202
PHONE: 303/837-3008
EDUCATION:
B.S., University of Kansas, 1949, Mining Engineering

McCarthy, Jr., William N.

Acting Executive Secretary
U.S. Environmental Protection Agency
Office of the Administrator
Science Advisory Board
Technology and Pollution Control Committee
401 M Street, S.W.
Washington, DC 20460
PHONE: 202/472-9444 FTS: 472-9444
EDUCATION:
B.Ch.E., Catholic University of America, 1958, Chemical Engineering
M.S., University of Maryland, 1962, Chemical Engineering

McClendon, Lottie T.

Water Program Manager
U.S. Department of Commerce
U.S. National Bureau of Standards
Office of Environmental Measurement
Chemistry Building, Room A347
Washington, DC 20234
PHONE: 301/921-3775 FTS: 921-3775

McDonald, Bill

Director
State of Colorado
Department of Natural Resources
Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203
PHONE: 303/839-3441
EDUCATION:
B.S., Colorado College, Chemistry
J.D., University of Chicago, Law
M.S., University of Michigan, Natural Resources Management

McFarlane, Samuel B.

Manager
U.S. Department of Energy
Denver Project Office
1705 South Yukon Street
Lakewood, CO 80226
PHONE: 303/234-5791 FTS: 234-5791
EDUCATION:
B.S., University of Maryland, 1939

McGinnies, William J.

Range Scientist
U.S. Department of Agriculture
Science and Education Administration
Agricultural Research
Colorado State University
Crops Research Laboratory
Fort Collins, CO 80523
PHONE: 303/484-8777 FTS: 323-5227
EDUCATION:
B.S., Colorado State University, 1948, Forestry
M.S., University of Wisconsin, 1952, Botany
Ph.D., Colorado State University, 1967, Range Science

McKell, Cyrus

Professor and Director of Institute for Land Rehabilitation
Utah State University
Department of Range Management
UMC-52
Logan, UT 84322
PHONE: 801/750-2476
EDUCATION:
B.S., University of Utah, 1949, Biology
M.S., University of Utah, 1950, Botany
Ph.D., Oregon State University, 1956, Plant Ecology/Range Management

McMillion, Leslie G.

Hydrologist
U.S. Environmental Protection Agency
Environmental Monitoring and Support Laboratory
P.O. Box 15027
Las Vegas, NV 89114
PHONE: 702/736-2969 FTS: 595-2969
EDUCATION:
B.S., Marshall University, 1952
M.S., Michigan State University, 1957

McNeal, James M.

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Branch of Regional Geochemistry
Denver Federal Center
MS-925
Denver, CO 80225
PHONE: 303/234-5629 FTS: 234-5629
EDUCATION:
B.A., College of Wooster, 1966, Chemistry
Ph.D., Pennsylvania State University, 1975, Geochemistry

McWhorter, David B.

Professor
Colorado State University
Department of Agriculture and Chemical Engineering
Fort Collins, CO 80523
PHONE: 303/491-8358
EDUCATION:
P.E., Colorado School of Mines, 1965, Petroleum Engineering
M.S., Colorado State University, 1966, Civil Engineering
Ph.D., Colorado State University, 1971, Agricultural Engineering

Mecham, Priscilla

Area Archaeologist
U.S. Department of Interior
Bureau of Land Management
White River Resource Area
P.O. Box 928
Meeker, CO 81641
PHONE: 303/878-5084
EDUCATION:
B.A., State University of New York at Albany, 1975, Anthropology/Archaeology

Meglen, Robert R.

Director of Analytical Laboratory
University of Colorado at Denver
Center for Environmental Sciences
Environmental Trace Substances Research Program
1100 14th Street, Box 136
Denver, CO 80202
PHONE: 303/629-3297
EDUCATION:
B.S., Iowa State University, 1966, Chemistry
M.S., University of Colorado, 1969, Physical Chemistry
Ph.D., University of Colorado, 1971, Physical Chemistry

Melvin, Jr., Walter W.

Professor
Colorado State University
Institute of Environmental Health Science
Veterinary Science Building, Room 117
Fort Collins, CO 80523
PHONE: 303/491-6178
EDUCATION:
M.D., University of Colorado, 1949
M.P.H., Harvard University, 1953, Industrial Hygiene
D.Sc., University of Cincinnati, 1962, Environmental Toxicology

Mercer, Mark

Environmental Engineer
U.S. Environmental Protection Agency
Office of Water and Waste Management
Office of Solid Waste
Hazardous & Industrial Waste Division
Waste Characterization Branch
401 M Street, S.W.
WH-565
Washington, DC 20460
PHONE: 202/755-9187 FTS: 755-9187
EDUCATION:
B.S., University of Maryland, 1972, Environmental Engineering
M.S., University of Maryland, 1976, Environmental Engineering

Merriam, Norm

Research Chemical Engineer
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2290 FTS: 328-4290
EDUCATION:
B.S., Iowa State University, 1961, Chemical Engineering
M.B.A., Indiana State University, 1971, General Program

Millar, Rod

Resource Specialist
State of Utah
Energy Office
231 East 400 South
Salt Lake City, UT 84111
PHONE: 801/533-5424
EDUCATION:
B.S., University of Utah, 1972, Physics
M.S., University of Utah, 1974, Nuclear Engineering

Miller, Betty

Regional Administrator
U.S. Department of Housing and Urban Development
Region VIII
1405 Curtis
Denver, CO 80202
PHONE: 303/837-4513 FTS: 327-4513
EDUCATION:
B.S., Ohio University, 1948, Chemistry

Miller, Glen A.

Supervisory Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
B.A., University of Tennessee, 1952, Geology
M.S., University of Tennessee, 1953, Geology

Miller, Wendy L.

District Ranger
U.S. Department of Agriculture
Forest Service
Blanco District
White River National Forest
P.O. Box 358
Meeker, CO 81641
PHONE: 303/878-4039
EDUCATION:
B.L.A., University of Oregon, 1970, Landscape Architecture

Mills, Paul E.

Quality Assurance Officer
U.S. Environmental Protection Agency
Industrial Environmental Research
Laboratory-Cincinnati
Program Operations Office
Special Projects Staff
26 West St. Clair
Cincinnati, OH 45268
PHONE: 513/684-4216 FTS: 684-4216
EDUCATION:
B.S., Michigan State University, 1971, Biochemistry
M.B.A., Michigan State University, 1977, Business Administration

Monti, Dario

Director
U.S. Department of Energy
Office of Environment
Office of Technology Impacts
Division of Technology Assessment
E-201
Washington, DC 20545
PHONE: 301/353-4442
EDUCATION:
B.A., University of Minnesota, 1952, Chemical Engineering

Moorhead, Richard J.

Realty Specialist
U.S. Department of Interior
Bureau of Land Management
Division of Resource Management
P.O. Box 248
Craig, CO 81625
PHONE: 303/824-3417
EDUCATION:
B.A., California State University, 1969, Physical Geography

Morse, Jerome G.

Consultant
Colorado School of Mines
Department of Physics
2221 East Street
Golden, CO 80401
PHONE: 303/278-8320
EDUCATION:
B.S., City College of New York, 1942, Chemistry
M.S., University of Pennsylvania, 1947, Physical Chemistry
Ph.D., Illinois Institute of Technology, 1952, Physical Chemistry

Moss, Dean

Realty Specialist
U.S. Department of Interior
Bureau of Land Management
White River Resource Area
P.O. Box 928
Meeker, CO 81641
PHONE: 303/878-5084
EDUCATION:
B.S., Colorado State University, 1964, Natural Resources

Mott, William E.

Director
U.S. Department of Energy
Office of Environment
Office of Environmental Complicance
and Overview
Environmental Control Technology
E-201
Washington, DC 20545
PHONE: 301/353-3016 FTS: 233-3016
EDUCATION:
A.B., College of Wooster, 1949, Physics
M.S., Carnegie-Mellon, 1951, Physics
Ph.D., Carnegie-Mellon, 1953, Nuclear Physics

Mueller, Leonard H.

Research Chemist
U.S. Environmental Protection Agency
Environmental Research Laboratory
6201 Congdon Boulevard
Duluth, MN 55804
PHONE: 218/727-6692x529 FTS: 783-9529
EDUCATION:
B.A., Mankato State University, 1964

Natusch, David S.

Professor and Department Chairman
Colorado State University
Department of Chemistry
Fort Collins, CO 80523
PHONE: 303/491-5391
EDUCATION:
B.Sc., University of New Zealand, 1961, Physics/Mathematics/Chemistry
M.Sc., University of Cantonburry, 1963, Chemistry
D.Phil., Oxford University, 1966, Physical Chemistry

Neel, Robert R.

Technical Staff Member
U.S. Department of Energy
Sandia Laboratories
P.O. Box 5800
Albuquerque, NM 87185
PHONE: 505/264-4227 FTS: 475-4227
EDUCATION:
B.S.M.E., University of New Mexico, 1952

Nelson, Robert H.

Director, Naval Petroleum and
Oil Shale Reserves
U.S. Department of Energy
Office of Resource Applications
12th & Pennsylvania, N.W.
Room 3344
Washington, DC 20461
PHONE: 202/633-8678 FTS: 633-8678
EDUCATION:
B.S., U.S. Naval Academy, 1949, Electrical Engineering
B.S., Rensselaer Polytechnic Institute, 1951, Civil Engineering
M.S., University of Texas, 1962, Petroleum Engineering

Nevens, Thomas

Senior Research Engineer
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.S., University of Colorado, 1944, Chemical Engineering
Ph.D., Ohio State University, 1950, Chemical Engineering

Newport, Bob D.

Environmental Scientist
U.S. Environmental Protection Agency
Robert S. Kerr Environmental Research Laboratory
Groundwater Research Branch
P.O. Box 1198
Ada, OK 74820
PHONE: 405/332-8800 FTS: 743-2201
EDUCATION:
B.S., East Central Oklahoma State University, 1970, Environmental Science
M.S., East Central Oklahoma State University, 1975, Environmental Science

Nicholson, David E.

Mining Engineer
U.S. Department of Interior
Bureau of Mines
Spokane Research Center
East 315 Montgomery
Spokane, WA 99207
PHONE: 509/484-1610 FTS: 439-6880
EDUCATION:
B.S., Michigan Technological University, 1954, Mining Engineering

Nieuwenhuis, Carol A.

Staff Scientist
University of Colorado at Denver
Center for Environmental Sciences
Oil Shale Task Force
1100 14th Street, Box 136
Denver, CO 80202
PHONE: 303/629-3460
EDUCATION:
B.A., Occidental College, 1975, Geology
M.S., University of California-Berkeley, 1978, Geology

Noble, Richard D.

Assistant Professor
University of Wyoming
Department of Chemical Engineering
Laramie, WY 82071
PHONE: 307/766-6192
EDUCATION:
B.E., Stevens Institute of Technology, 1968, Engineering
M.E., Stevens Institute of Technology, 1969, Engineering
Ph.D., University of California-Davis, 1976, Chemical Engineering

Noll, Frank

Chief
U.S. Department of Interior
Bureau of Land Management
Division of Resource Management
Craig District Office
P.O. Box 248
Craig, CO 81625
PHONE: 303/824-3417
EDUCATION:
B.S., Iowa State University, 1953, Animal Husbandry
M.S., Colorado State University, 1955, Range Management

Noll, William L.

Program Coordinator
U.S. Department of Energy
Denver Project Office
P.O. Box 26500
Lakewood, CO 80226
PHONE: 303/234-5791 FTS: 234-5791
EDUCATION:
B.S., Auburn University, 1965
M.S., University of Dayton, 1974

Norman, Vernon W.

Subdistrict Chief
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
P.O. Box 810
Meeker, CO 81641
PHONE: 303/878-5086
EDUCATION:
B.S.C.E., University of New Mexico, 1964
M.S.C.E., University of New Mexico, 1968

Oberwager, David

Environmental Scientist
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Supervisor's Office
Conservation Division
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
B.S., Colorado State University, 1947, Animal Husbandry/Soils/Range

O'Brien, W. Jack

Regional Coordinator
U.S. Department of Energy
Denver Project Office
Environment and Safety
1075 South Yukon Street
Lakewood, CO 80226
PHONE: 303/234-5791
EDUCATION:
B.S., Colorado College, 1950
M.S., Vanderbilt University, 1953

Olsson, William A.

Technical Staff Member
U.S. Department of Energy
Sandia Laboratories
Geomechanics Division 5532
Albuquerque, NM 87185
PHONE: 505/264-7344 FTS: 475-7344
EDUCATION:
B.A., Southern Illinois University, 1966, Geology
M.S., Southern Illinois University, 1968, Geology
Ph.D., University of Illinois, 1973, Geology

Ondov, John M.

Senior Scientist
U.S. Department of Energy
Lawrence Livermore Laboratory
Environmental Sciences Division
P.O. Box 5507, L-453
Livermore, CA 94550
PHONE: 415/422-0904 FTS: 532-0904
EDUCATION:
B.S., Muhlenberg College, 1970, Chemistry
Ph.D., University of Maryland, 1974, Chemistry

O'Sullivan, Robert

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Chemical Resources Branch
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-3473
EDUCATION:
B.Sc., Yale University, 1945, Science
M.S., University of New Mexico, 1953, Science

Packer, Paul E.

Project Leader
U.S. Department of Agriculture
Forest Service
Intermountain Forest and Range Experimental Station
Reclamation of Western Mined Lands
860 North 12th East
Logan, UT 84321
PHONE: 801/752-1311 FTS: 586-3270
EDUCATION:
B.S., University of California-Berkeley, 1939, Forestry
M.S., University of California-Berkeley, 1950, Range Management
Ph.D., Syracuse University, 195[illegible], Forest Hydrology

Pallay, Barry

Chemical Engineer
U.S. Public Health Service
National Institute for Occupational Safety and Health
Environmental Investigations Branch
Division of Respiratory Disease Studies
Center for Disease Control
944 Chestnut Ridge Road
Morgantown, WV 26505
PHONE: 304/599-7421 FTS: 923-7421
EDUCATION:
B.S., Clarkson College of Technology, 1968, Chemical Engineering
M.S., University of Maryland, 1970, Chemical Engineering

Parrish, R. Leon

Technical Staff Member
U.S. Department of Energy
Sandia Laboratories
Division 4734
Kirtland Air Force Base-East
Albuquerque, NM 87185
PHONE: 505/264-7457 FTS: 475-7457
EDUCATION:
B.S.C.E., University of Missouri, 1959

Patt, Ralph

Project Chief of Roan-Parachute Piceance Basin Groundwater Model
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
P.O. Box 2027
Grand Junction, CO 81501
PHONE: 303/245-5257 FTS: 322-0302
EDUCATION:
B.S., University of Pittsburgh, 1952, Geology

Paulson, Neil R.

Officer
U.S. Department of Agriculture
Forest Service
Air Management
P.O. Box 2417
Commonwealth Building, Room 340
Washington, DC 20013
PHONE: 703/378-5041 FTS: 235-8666
EDUCATION:
B.S., Michigan Technical University, 1958, Forest Management

Pearson, Marvin

District Manager
U.S. Department of Interior
Bureau of Land Management
Craig District Office
P.O. Box 248
Craig, CO 81625
PHONE: 303/824-3417
EDUCATION:
B.S., Utah State University, 1949

Pearson, Michael J.

Meteorologist
U.S. Environmental Protection Agency
Environmental Monitoring Systems Lab
P.O. Box 15027
Las Vegas, NV 89114
PHONE: 702/736-2969x352 FTS: 595-2969
EDUCATION:
B.S., University of California-Davis, 1972, Atmospheric Science
M.S., University of Nevada, 1975, Atmospheric Physics

Peck, Dallas L.

Chief Geologist
U.S. Department of Interior
U.S. Geological Survey
National Center
MS-911
Reston, VA 22092
PHONE: 703/860-6531 FTS: 928-7524
EDUCATION:
B.S., California Polytechnic Institute, 1951, Geology
M.S., California Polytechnic Institute, 1953, Geology
Ph.D., Harvard University, 1960, Geology

Pelroy, Richard

Senior Research Scientist
U.S. Department of Energy
Pacific Northwest Laboratories
Biology Department
Battelle Boulevard
Richland, WA 99352
PHONE: 509/942-3251 FTS: 444-3251
EDUCATION:
B.S., University of Washington, 1965, Microbiology
Ph.D., University of Washington, 1969, Microbiology

Pendleton, Jim

Engineering Geologist
State of Colorado
Department of Natural Resources
Division of Mined Land Reclamation
1313 Sherman Street, Room 423
Denver, CO 80203
PHONE: 303/839-2895
EDUCATION:
A.B., Princeton University, 1969, Geological Science
M.S., University of Colorado, 1973, Geological Science
Ph.D., University of Colorado, 1978, Engineering Geology

Perkins, Richard

Associate Manager
U.S. Department of Energy
Pacific Northwest Laboratories
Physical Sciences Department
Battelle Boulevard
Richland, WA 99352
PHONE: 509/942-3910 FTS: 444-3467
EDUCATION:
B.S., Utah State University, 1950, Organic Chemistry
M.S., Utah State University, 1952, Organic Chemistry

Persoff, Peter

Chemical Engineer
U.S. Department of Energy
Lawrence Berkeley Laboratory
Oil Shale Program
University of California
Berkeley, CA 94720
PHONE: 415/486-5931
EDUCATION:
B.E., Cooper Union, 1966
M.S., University of California-Berkeley, 1976

Peterson, Kathy

Assistant to Chairman of Oil Shale Task Force
University of Colorado at Denver
Center for Environmental Sciences
1100 14th Street, Box 136
Denver, CO 80202
PHONE: 303/629-3460

Petzrick, Paul A.

Director
U.S. Department of Energy
Office of Resource Applications
12th & Pennsylvania, N.W.
Room 6432
Washington, DC 20461
PHONE: 202/633-8660 FTS: 633-8660
EDUCATION:
B.S., U.S. Naval Academy, 1954
B.S.C.E., Rensselaer Polytechnic Institute, 1957
M.S., Princeton University, 1966

Phillips, T. Terrence

Assistant Professor
University of Wyoming
Department of Chemical Engineering
Laramie, WY 82071
PHONE: 303/766-6464
EDUCATION:
B.S., Arizona State University, 1966, Engineering
Ph.D., Princeton University, 1970, Chemical Engineering

Pitman, Janet

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Chemical Resources Branch
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-5121
EDUCATION:
B.A., University of Colorado, 1969, Geology

Piver, Warren T.

Chemical Engineer
National Institute of Health
National Institute of Environmental Health Sciences
P.O. Box 12233
Research Triangle Park, NC 27709
PHONE: 919/541-3471 FTS: 629-3471
EDUCATION:
B.S., Duke University, 1963, Chemistry
M.S., North Carolina State University, 1970, Chemical Engineering
Ph.D., North Carolina State University, 1972, Chemical Engineering

Poulson, Richard E.

Manager, Oil Shale Environmental Program
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2258 FTS: 328-4258
EDUCATION:
M.S., University of California-Berkeley, 1957
Ph.D., Michigan State University, 1959

Poulton, Patricia Lynne

Policy Analyst, Professional Staff
Congress of the United States
Office of Technology Assessment
Materials Program
600 Pennsylvania Avenue, S.E.
Washington, DC 20510
PHONE: 202/225-6479
EDUCATION:
B.A., College of Wooster, 1973, Literature

Powers, Thomas J.

Environmental Engineering Consultant
U.S. Environmental Protection Agency
Industrial Environmental Research Laboratory-Cincinnati
5555 Ridge Avenue
Cincinnati, OH 45268
PHONE: 513/684-4363 FTS: 684-4363
EDUCATION:
B.S., Pennsylvania State University, 1957
M.S., University of Cincinnati, 1970

Prien, Isabell

Senior Oil Shale Advisor
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911

Prince, Donald G.

Assistant Director
State of Utah
Division of State Lands
231 East 400 South, Room 411
Salt Lake City, UT 84111
PHONE: 801/533-5381
EDUCATION:
B.S., University of Utah, 1953, Geography
M.Sc., University of Utah, 1954, Geography/Geology

Princiotta, Frank T.

Director
U.S. Environmental Protection Agency
Office of Research and Development
Office of Environmental Engineering and Technology
Energy Processes Division
401 M Street, S.W.
Washington, DC 20460
PHONE: 202/755-0205 FTS: 755-2737
EDUCATION:
B.S., City College of New York, 1962, Chemical Engineering

Probstein, Ronald F.

Professor
Massachusetts Institute of Technology
Department of Mechanical Engineering
Room 3-246
Cambridge, MA 02139
PHONE: 617/253-2240
EDUCATION:
Ph.D., Princeton University, Aeronautical Engineering

Ragaini, Richard C.

Deputy Division Leader
U.S. Department of Energy
Lawrence Livermore Laboratory
Environmental Sciences Division
P.O. Box 5507, L-453
Livermore, CA 94550
PHONE: 415/422-3840 FTS: 532-3840
EDUCATION:
B.A., Clark University, 1963, Chemistry
Ph.D., Massachusetts Institute of Technology, 1967, Chemistry

Raley, John H.

Chemist
U.S. Department of Energy
Lawrence Livermore Laboratory
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6450 FTS: 532-6450
EDUCATION:
B.A., University of Utah, 1937
M.A., University of Utah, 1939
Ph.D., University of Rochester, 1942

Ramsey, Jerry W.

U.S. Department of Energy
Office of Fossil Energy
D-107
Washington, DC 20545
PHONE: 301/353-2707 FTS: 233-2877
EDUCATION:
A.B., Illinois College, 1956, Chemistry
M.S., Texas A & M, 1958, Analytical Chemistry

Rao, T. K.

Research Associate
U.S. Department of Energy
Oak Ridge National Laboratory
Biology Division
Mutagenesis & Teratogenesis
P.O. Box Y
Oak Ridge, TN 37830
PHONE: 615/574-0846 FTS: 624-0846
EDUCATION:
B.Sc., Nagpur University, 1966, Biology/Chemistry
M.Sc., Osmania University, 1968, Radiation Biology
M.S., Florida State University, 1972, Genetics
Ph.D., Florida State University, 1976, Genetics

Raymond, Jack D.

Special Assistant to the Director
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2256 FTS: 328-4256
EDUCATION:
B.S., Boston University, 1942, Mechanical Engineering
M.Ed., Boston University, 1948, Personnel and Guidance

Redente, Edward

Instructor
Colorado State University
Department of Range Science
Fort Collins, CO 80523
PHONE: 303/491-6541
EDUCATION:
B.S., Western Michigan University, 1972, Geography
M.S., Colorado State University, 1974, Range Science
Ph.D., Colorado State University, 1980, Range Science

Reznek, Steven R.

Deputy Assistant Administrator
U.S. Environmental Protection Agency
Office of Research and Development
Office of Environmental Engineering and Technology
401 M Street, S.W.
Room 635
Washington, DC 20460
PHONE: 202/755-4857 FTS: 755-4858
EDUCATION:
B.S., Massachusetts Institute of Technology, 1963, Physics
Ph.D., Massachusetts Institute of Technology, 1968, Physics

Richards, Norman L.

Associate Director for Extramural Activities
U.S. Environmental Protection Agency
Environmental Research Laboratory
Sabine Island
Gulf Breeze, FL 32561
PHONE: 904/932-5311 FTS: 686-9011
EDUCATION:
B.A., University of Connecticut, 1957
M.S., University of Connecticut, 1960
Ph.D., University of Rhode Island, 1970

Rickers, Alvin E.

Director
State of Utah
Department of Health
Environmental Health
Air Quality
P.O. Box 2500
Salt Lake City, UT 84110
PHONE: 801/533-6121
EDUCATION:
B.S., University of Utah, 1949, Meteorology
M.S., University of Utah, 1966, Meteorology

Riegel, Kurt W.

Associate Deputy Assistant Administrator
U.S. Environmental Protection Agency
Office of Research and Development
Office of Environmental Engineering and Technology
RD-681
Washington, DC 20460
PHONE: 202/755-4857 FTS: 755-4857
EDUCATION:
B.A., Johns Hopkins University, Physics
Ph.D., University of Maryland, Physics

Ripzma, Howard R.

Assistant Director
State of Utah
Geological and Mineral Survey
606 Black Hawk Way
Salt Lake City, UT 84108
PHONE: 801/581-3061
EDUCATION:
A.B., Miami University, 1947, Geology
M.A., University of Wyoming, 1949, Geology

Robbins, Martin D.

Director
State of Colorado
Colorado Energy Research Institute
2221 East Street
Golden, CO 80401
PHONE: 303/279-2881
EDUCATION:
B.S., Tufts University, 1954, Chemistry
M.S., Massachusetts Institute of Technology, 1956, Ceramics/Metallurgy

Roberts, Cecil M.

Energy Minerals Coordinator
U.S. Department of Interior
Bureau of Land Management
Colorado State Office
1600 Broadway, Room 700
Denver, CO 80202
PHONE: 303/837-4325 FTS: 327-4325
EDUCATION:
B.S., University of Maine, 1953, Forest Management
M.S., University of Michigan, 1970, Natural Resource Administration

Roberts, Charles G.

Senior Water Resource Engineer
State of Colorado
Colorado Department of Health
4210 East 11th Avenue
Denver, CO 80220
PHONE: 303/320-8333
EDUCATION:
B.S., Southern Colorado State College, 1968, Geology
M.S.C.E., University of Colorado at Denver, 1977, Civil Engineering

Robinson, Phillip L.

Senior Policy Analyst
Congress of the United States
Office of Technology Assessment
Materials Program
600 Pennsylvania Avenue, S.E.
Washington, DC 20510
PHONE: 202/225-6555
EDUCATION:
B.A., Whittier College, 1969, International Relations/Philosophy
M.A., Cornell University, 1973, Comparative Politics
M.A., Oxford University, 1974, Modern European History
Ph.D., Cornell University, 1978, European Politics

Robson, Stanley G.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
Denver Federal Center
MS-415
Denver, CO 80225
PHONE: 303/234-3487
EDUCATION:
B.S., California State University, 1963, Mathematics

Rold, John

Director
State of Colorado
Department of Natural Resources
Colorado Geological Survey
1313 Sherman Street, Room 715
Denver, CO 80203
PHONE: 303/839-2611
EDUCATION:
B.A., University of Colorado, 1948, Geology
M.S., University of Colorado, 1950, Geology

Rotariu, George J.

Physical Scientist
U.S. Department of Energy
Office of Environment
Office of Technology Impacts
Technology Assessment Division
E-201
Washington, DC 20545
PHONE: 301/353-5865 FTS: 233-5865
EDUCATION:
B.S., University of Illinois, 1939, Physical Chemistry
M.S., University of Chicago, 1940, Physical Chemistry
Ph.D., University of Chicago, 1950, Physical Chemistry

Rothberg, Paul F.

Analyst in Physical Sciences
U.S. Library of Congress
Congressional Research Service
Washington, DC 20783
PHONE: 202/287-7019
EDUCATION:
B.S., University of Maryland, 1972
Ph.D., American University, 1978

Rothman, Albert J.

Deputy Leader
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6455 FTS: 532-6455
EDUCATION:
B.S., Columbia University, 1944, Chemical Engineering
M.S., Polytechnic Institute of New York, 1950, Chemical Engineering
Ph.D., University of California-Berkeley, 1[illegible] Chemical Engineering/Chemistry

Rousa, Gerald

U.S. Environmental Protection Agency
Office of Research and Development
401 M Street, S.W.
RD-681
Washington, DC 20460
PHONE: 202/755-9210 FTS: 426-4567
EDUCATION:
B.E.E., Syracuse University, 1950
M.S., University of Rochester, 1953

Rozich, Frank J.

Assistant Director
State of Colorado
Colorado Department of Health
Water Quality Control Division
4210 East 11th Avenue
Denver, CO 80220
PHONE: 303/320-8333
EDUCATION:
B.S., University of Kansas, 1949, Civil Engineering
M.S., University of California, 1952, Sanitary Engineering

Rubin, Ira B.

Research Associate
U.S. Department of Energy
Oak Ridge National Laboratory
Building 4500S, Room E-160
P.O. Box X
Oak Ridge, TN 37830
PHONE: 615/574-4876 FTS: 624-4876
EDUCATION:
B.S., University of Wisconsin, 1948

Rudnick, Jon

Staff Physician
U.S. Department of Energy
Los Alamos Scientific Laboratory
Health Division
Occupational Medicine
P.O. Box 1663
Los Alamos, NM 87545
PHONE: 505/667-7890 FTS: 843-7251
EDUCATION:
M.D., University of New Mexico

Runnells, Donald D.

Professor
University of Colorado
Department of Geological Sciences
Boulder, CO 80309
PHONE: 303/492-8323
EDUCATION:
B.S., University of Utah, 1958, Geology
M.A., Harvard University, 1960, Geology
Ph.D., Harvard University, 1964, Geology

Russell, Peter Paul

U.S. Department of Energy
Lawrence Berkeley Laboratory
University of California
Berkeley, CA 94720
PHONE: 415/845-8164 FTS: 451-6698
EDUCATION:
B.S., Rensselaer Polytechnic Institute, 1971, Biology
M.S., Rensselaer Polytechnic Institute, 1973, Environmental Engineering
Ph.D., University of California-Berkeley, 1979, Civil Engineering

Rutledge, Peter A.

Area Oil Shale Supervisor
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
M.E., Colorado School of Mines, 1959, Mining Engineering

Sandell, Edward T.

Mining Engineer
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
Conservation Division
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700
EDUCATION:
B.S., University of Texas, 1960, Mining Engineering

Sandholtz, Willis A.

Chemist
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6101 FTS: 532-6101
EDUCATION:
B.S., University of Washington, 1948, Chemical Engineering
M.S., University of Washington, 1949, Chemical Engineering

Santini, Danilo

Economist
U.S. Department of Energy
Argonne National Laboratory
9700 South Cass Avenue
Argonne, IL 60439
PHONE: 312/972-3758 FTS: 972-3758
EDUCATION:
B.A., Massachusetts Institute of Technology, 1968, Architecture
M.B.A., Illinois Institute of Technology, 1972, Business/Economics
Ph.D., Northwestern University, 1976, Urban Systems Engineering & Policy Analysis

Saulnier, George

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
1815 University Avenue
Madison, WI 53706
PHONE: 608/263-2141 FTS: 262-2488
EDUCATION:
B.S., Boston College, 1964, Geology
M.S., University of Wyoming, 1968, Geology
Ph.D., University of Nevada, 1978, Hydrology

Schambra, Philip E.

Associate Director for Interagency Programs
U.S. National Institute of Health
U.S. National Institute of Environmental Health Sciences
Interagency Programs
P.O. Box 12233
Research Triangle Park, NC 27709
PHONE: 919/541-3467 FTS: 629-3467
EDUCATION:
B.A., Rice University, 1956, Physics
Ph.D., Yale University, 1961, Biophysics

Schmidt-Collerus, Josef J.

Professor and Senior Research Fellow
University of Denver
Chemistry Department
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
Cand.Med., University of Vienna, 1932, Medicine
B.S., Technical University of Vienna, 1935, Chemical Engineering
Dr.Ing., Technical University of Brunn, 1939, Chemistry
Ph.D., Goethe University (Frankfurt), 1942, Biochemistry

Schmitz, Steve

Director
State of Colorado
Department of Local Affairs
Socio-Economic Impact Office
Energy and Mineral Impacts Division
1313 Sherman Street, Room 518
Denver, CO 80203
PHONE: 303/839-2674
EDUCATION:
B.A., University of Colorado, 1966, Psychology
M.A., University of Colorado, 1972, Urban and Regional Planning

Schmuck, Philip H.

Director
State of Colorado
Department of Local Affairs
Division of Planning
1313 Sherman Street, Room 520
Denver, CO 80203
PHONE: 303/839-2351
EDUCATION:
B.S., Kent State University, 1954, Geography

Schottler, George R.

Physical Scientist
U.S. Department Of Interior
Bureau of Mines
Denver Mining Research Center
Denver Federal Center
Building 20
Denver, CO 80225
PHONE: 303/234-4161 FTS: 234-3848
EDUCATION:
B.S., Michigan Technological University, 1956, Geological Engineering
M.S., University of Arizona, 1962, Mining Engineering

Schwengels, Paul F.

Research Analyst
U.S. Environmental Protection Agency
Office of Research and Development
Program Integration and Policy Staff
RD-681
Washington, DC 20460
PHONE: 202/426-9434 FTS: 426-9434
EDUCATION:
B.A., Parsons College, 1970, Political Science

Scroggin, Don G.

Energy Staff Member
Executive Office of the President
Council on Environmental Quality
722 Jackson Place, N.W.
Washington, DC 20006
PHONE: 202/395-4946
EDUCATION:
B.S., Centenary College of Louisiana, 1966, Chemistry
M.A., Harvard University, 1971, Chemistry
Ph.D., Harvard University, 1972, Chemistry
J.D., Yale University, 1978, Law

Sedman, Charles B.

Environmental Engineer
U.S. Environmental Protection Agency
Office of Air Quality Planning
and Standards
MS-13
Research Triangle Park, NC 27711
PHONE: 919/541-5213 FTS: 629-5213
EDUCATION:
M.S., Georgia Institute of Technology, 1971, Chemical Engineering

Seibel, Richard

Chief
U.S. Department of Interior
Bureau of Mines
Mine Waste Management
2401 E Street, N.W.
Washington, DC 20241
PHONE: 202/634-7175 FTS: 634-7175
EDUCATION:
B.A., Saint Francis College, 1968, Mathematics

Shaffron, Michael

Research Associate
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.S., University of Rhode Island, 1975, Microbiology

Sheerin, John C.

Economist
U.S. Department of Energy
Office of Resource Applications
12th & Pennsylvania, N.W.
MS-3344
Washington, DC 20461
PHONE: 202/633-8651
EDUCATION:
B.S., St. Joseph's University, 1965
M.A., Syracuse University, 1969
Ph.D., University of Colorado, 1977

Shelton, David C.

Geotechnical Reclamation Supervisor
State of Colorado
Department of Natural Resources
Division of Mined Land Reclamation
1313 Sherman Street, Room 723
Denver, CO 80203
PHONE: 303/839-3567
EDUCATION:
B.A., Ohio State University, 1974
M.A., University of Colorado, 1977

Shukle, Robert J.

State of Colorado
Colorado Department of Health
Water Quality Control Division
4210 East 11th Avenue
Denver, CO 80220
PHONE: 303/320-8333x4162
EDUCATION:
B.S., Michigan State University, 1971, Civil Engineering

Shull, Roger D.

Director
U.S. Department of Energy
Office of Environment
Office of Technology Impacts
Environmental Impacts Division
E-201
Washington, DC 20545
PHONE: 301/353-3311 FTS: 233-3311
EDUCATION:
B.S., Michigan State University, 1962, Civil Engineering
M.S., Michigan State University, 1963, Sanitary Engineering
Ph.D., University of Texas, 1968, Environmental Health Engineering

Sievers, Robert

Professor
University of Colorado
Department of Chemistry
Campus Box 215
Boulder, CO 80309
PHONE: 303/492-8083
EDUCATION:
B.S., University of Tulsa, 1956, Chemistry
M.S., University of Illinois, 1958, Chemistry
Ph.D., University of Illinois, 1960, Chemistry

Silverman, Mark N.

Director
U.S. Department of Energy
Denver Project Office
1075 South Yukon Street
Lakewood, CO 80226
PHONE: 303/234-5791 FTS: 234-5791
EDUCATION:
B.S., U.S. Military Academy, 1961
M.A., University of Pennsylvania, 1969

Sisemore, Clyde J.

Staff Member
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6457 FTS: 532-6457
EDUCATION:
B.S., California State University, 1955, Physics
M.S., University of California-Berkeley, 1962, Physics

Skinner, Quinton

Associate Professor
University of Wyoming
College of Agriculture
Range Management Division
Laramie, WY 82071
PHONE: 307/766-4139
EDUCATION:
B.S., University of Wyoming, 1962, Biological Sciences
M.S., University of Wyoming, 1970, Parks and Recreation
Ph.D., University of Wyoming, 1974, Range Management

Sladek, Thomas A.

Project Manager
Congress of the United States
Office of Technology Assessment
600 Pennsylvania Avenue, S.E.
Washington, DC 20510
PHONE: 202/225-6473
EDUCATION:
B.S., University of Michigan, 1967, Chemical Engineering
M.S., Colorado School of Mines, 1968, Chemical and Petroleum Refining Engineering
Ph.D., Colorado School of Mines, 1971, Chemical and Petroleum Refining Engineering

Slinn, W. George N.

Coordinator
University of Washington
Joint Center for Graduate Studies
Mechanical Engineering Program
100 Sprout Road
Richland, WA 99352
PHONE: 509/375-3176 FTS: 444-7241
EDUCATION:
B.S., University of British Columbia, 1961, Engineering Physics
M.S., University of Ottawa, 1962, Physics
Ph.D., Cornell University, 1969, Engineering

Smith, Curtis

Area Manager
U.S. Department of Interior
Bureau of Land Management
White River Resource Area
P.O. Box 928
Meeker, CO 81641
PHONE: 303/878-5084
EDUCATION:
B.A., Fort Hays Kansas State University, 1963, Botany

Smith, David A.

Acting Deputy Director
U.S. Department of Energy
Office of Environment
Office of Health & Environmental Research
Health Effects Research Division
E-201
Washington, DC 20545
PHONE: 301/353-3681 FTS: 233-3681
EDUCATION:
B.A., Dana College, 1959, Chemistry
Ph.D., University of Southern California, 1964, Biochemistry

Smith, John Ward

Manager
U.S. Department of Energy
Laramie Energy Technology Center
Division of Resource Characterization
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2235
EDUCATION:
B.A., University of Utah, 1946, Chemistry

Smith, Margery

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Denver Federal Center
Building 25, MS-939
Denver, CO 80225
PHONE: 303/234-5120
EDUCATION:
B.A., University of Missouri, 1949, Geology

Snyer, William H.

Research Chemist
University of Denver
Denver Research Institute
Laboratories for Applied Mechanics
Denver, CO 80208
PHONE: 303/753-2783
EDUCATION:
B.S., Colorado State University, 1955, Chemistry

Sohn, Hong Y.

Assistant Professor
University of Utah
Departments of Metallurgy and Metallurgical Engineering and Mining and Fuels Engineering
Salt Lake City, UT 84112
PHONE: 801/581-5491
EDUCATION:
B.S., Seoul National University, 1962, Chemical Engineering
M.Sc., University of New Brunswick, 1966, Chemical Engineering
Ph.D., University of California-Berkeley, 1970, Chemical Engineering

Spall, W. Dale

Staff Member
U.S. Department of Energy
Los Alamos Scientific Laboratory
Life Sciences Division
MS-890
Los Alamos, NM 87545
PHONE: 505/667-2773 FTS: 843-2773
EDUCATION:
B.A., Colorado College, 1966, Chemistry
Ph.D., University of New Mexico, 1970, Analytical Chemistry

Sparling, Edward W.

Assistant Professor (Visiting Fellow)
Yale University
Department of Economics
New Haven, CT 06520
PHONE: 203/248-2476
EDUCATION:
B.S., University of Oregon, 1962, Social Sciences
M.S., University of Wisconsin, 1972, Agricultural Economics
Ph.D., University of Wisconsin, 1976, Agricultural Economics

Springwater, Ray

Realty Specialist
U.S. Department of Interior
Bureau of Indian Affairs
Uinta and Ouray Agency
Fort Duchesne, UT 84026
PHONE: 801/722-2406x220
EDUCATION:
B.S., Northeastern Oklahoma State University, 1975, Industrial Engineering

Stead, Frank

Geologist
U.S. Department of Interior
U.S. Geological Survey
Geologic Division
Special Projects Branch
Denver Federal Center
MS-954
Denver, CO 80225
PHONE: 303/234-2261 FTS: 234-2261
EDUCATION:
B.S., City College of New York, 1935
M.S., Columbia University, 1937
Ph.D., Columbia University, 1941

Stemmle, James T.

Coordinator
U.S. Environmental Protection Agency
Interagency Energy Environment Program
Monitoring and Instrumentation
401 M Street, S.W.
RD-682
Washington, DC 20460
PHONE: 202/426-0265 FTS: 426-0265
EDUCATION:
Ph.D., Catholic University, 1973, Physical Inorganic Chemistry

Stephan, David G.

Director
U.S. Environmental Protection Agency
Industrial Environmental Research Laboratory-Cincinnati
26 West St. Clair Street
Cincinnati, OH 45268
PHONE: 513/684-4402 FTS: 684-4402
EDUCATION:
B.S., Ohio State University, 1950, Chemical Engineering
M.S., Ohio State University, 1953, Chemical Engineering
Ph.D., Ohio State University, 1955, Chemical Engineering

Stevens, Aldred L. (Al)

Supervisor
U.S. Department of Energy
Sandia Laboratories
Oil Shale Program Division 4734
P.O. Box 5800
Albuquerque, NM 87185
PHONE: 505/844-2392 FTS: 844-2392
EDUCATION:
B.S., Michigan State University, 1960, Mechanical Engineering
M.S., Michigan State University, 1961, Material Science
Ph.D., Michigan State University, 1968, Applied Mechanics

Stevens, Pamela

Librarian
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.A., University of California-Los Angeles, 1971, Mathematics
M.A., University of Denver, 1976, Librarianship and Information Management

Stewart, Bill M.

U.S. Department of Interior
Bureau of Mines
Spokane Research Center
East 315 Montgomery
Spokane, WA 99207
PHONE: 509/484-1610 FTS: 439-6880
EDUCATION:
B.S., Montana College of Mineral Science and Technology, 1970, Petroleum Engineering

Struber, Harold

Chemist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
Denver Federal Center
MS-415
Denver, CO 80225
PHONE: 303/234-3975
EDUCATION:
B.A., Macalester College, 1971, Chemistry
M.S., University of Colorado, 1976, Organic Chemistry

Stuermer, Daniel H.

Environmental Chemist
U.S. Department of Energy
Lawrence Livermore Laboratory
Environmental Sciences Division
P.O. Box 5507, L-453
Livermore, CA 94550
PHONE: 415/422-0903 FTS: 532-0903
EDUCATION:
B.A., University of California, 1970
Ph.D., Massachusetts Institute of Technology, 1975

Sudduth, Bruce C.

Manager
U.S. Department of Energy
Laramie Energy Technology Center
Division of Engineering
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2244 FTS: 328-4244
EDUCATION:
B.S., Washington University, 1969, Chemical Engineering

Sudweeks, Calvin K.

Director
State of Utah
Department of Health
Water Pollution Control
150 West North Temple
Salt Lake City, UT 84110
PHONE: 801/533-6146
EDUCATION:
B.S., Utah State University
M.S., Harvard University

Surles, Terry

Program Manager
U.S. Department of Energy
Argonne National Laboratory
Energy and Environmental Systems Division
Argonne, IL 60439
PHONE: 312/972-3759 FTS: 972-3759
EDUCATION:
B.S., Saint Lawrence University, 1966, Chemistry
Ph.D., Michigan State University, 1970, Analytical Chemistry

Sutton, Glen

Chief
U.S. Department of Labor
Mine Safety & Health Administration
Denver Technical Support Center
Industrial Health Branch
P.O. Box 25367
Denver, CO 80225
PHONE: 303/234-4824
EDUCATION:
M.E., Missouri School of Mines, 1949, Mining Engineering

Taylor, David R.

Research Associate
Colorado State University
Department of Chemistry
Fort Collins, CO 80523
PHONE: 303/491-5409
EDUCATION:
B.S., University of Michigan, 1968, Chemistry
M.S., University of Wisconsin, 1972, Chemistry
Ph.D., University of Wisconsin, 1976, Inorganic Chemistry

Taylor, Graham C.

Research Economist
University of Denver
Denver Research Institute
Industrial Economics Division
Denver, CO 80208
PHONE: 303/753-2976
EDUCATION:
B.Sc., Imperial College of London, 1960, Engineering
M.Sc., Imperial College of London, 1963, Electrical Engineering
M.S.C., Loughborough University, 1970, Administration
Ph.D., Colorado School of Mines, 1978, Mineral Economics

Taylor, O. James

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
Denver Federal Center
MS-415
Denver, CO 80225
PHONE: 303/234-3487
EDUCATION:
B.S., University of Arizona, 1955, Geological Engineering
M.S., University of Arizona, 1960, Geology

Tedeschi, Terry L.

Administrative Director
University of Colorado at Denver
Center for Environmental Sciences
1100 14th Street, Box 136
Denver, CO 80202
PHONE: 303/629-3460
EDUCATION:
M.A., New York University, 1974, European History

Telliard, William A.

Chief
U.S. Environmental Protection Agency
Office of Water and Waste Management
Office of Water Planning and Standards
Effluent Guidelines Division
Energy and Mining Branch
401 M Street, S.W.
WH-552
Washington, DC 20460
PHONE: 202/426-2707 FTS: 426-2707
EDUCATION:
B.S., Pennsylvania State University, 1964, Chemistry
M.S., Pennsylvania State University, 1966, Chemistry

Tewes, Howard A.

U.S. Department of Energy
Lawrence Livermore Laboratory
P.O. Box 808
Livermore, CA 94550
PHONE: 415/422-6464 FTS: 532-6464
EDUCATION:
B.S., University of California-Los Angeles, 1948
M.S., University of California-Los Angeles, 1950
Ph.D., University of California-Los Angeles, 1952

Thoem, Terry L.

Director
U.S. Environmental Protection Agency
Regional Staff, Region VIII
Office of Energy Policy Coordination
1860 Lincoln Street
Denver, CO 80295
PHONE: 303/837-5914 FTS: 327-5914
EDUCATION:
B.S., Iowa State University, 1967, Chemical Engineering
M.S., University of Washington, 1975, Environmental Engineering

Thomas, Harold E.

Petroleum Engineer
Program Manager
U.S. Department of Energy
Office of Fossil Energy
Fossil Fuel Extraction Division
D-107
Washington, DC 20545
PHONE: 301/353-2728 FTS: 233-2728
EDUCATION:
B.S., 1962, Mining Engineering

Thomas, Robert W.

Supervisor
U.S. Environmental Protection Agency
Corvallis Environmental Research Lab
Environmental Science
301 (H) Task Force
200 S.W. 35th Street
Corvallis, OR 97330
PHONE: 503/757-4754
EDUCATION:
B.S., University of Washington, 1962, Oceanography

Thurnau, Robert C.

Research Physical Scientist
U.S. Environmental Protection Agency
Industrial Environmental Research Laboratory-Cincinnati
Fuels Technology Branch, ESECD
Cincinnati, OH 45268
PHONE: 513/684-4363 FTS: 684-4363
EDUCATION:
B.S., Syracuse University, 1966
M.S., Wilkes College, 1969

Tichenor, Bruce A.

Environmental Engineer
U.S. Environmental Protection Agency
Industrial Environmental Research Laboratory
Chemical Processes Branch
MS-62
Research Triangle Park, NC 27711
PHONE: 919/541-2547 FTS: 629-2547
EDUCATION:
B.S., Oregon State University, 1962
Ph.D., Oregon State University, 1966

Tillery, Marvin

Leader
U.S. Department of Energy
Los Alamos Scientific Laboratory
Aerosol Studies Section
Industrial Hygiene Group
P.O. Box 1663
Los Alamos, NM 87545
PHONE: 505/667-5722 FTS: 843-5722
EDUCATION:
B.S., University of New Mexico, 1967
M.S., University of Rochester, 1971

Timourian, Hector

Coordinator for Developing Technologies
U.S. Department of Energy
Lawrence Livermore Laboratory
Genetic and Environmental Toxicologist
Biomedical Division
P.O. Box 5507
Livermore, CA 94550
PHONE: 415/422-5659 FTS: 532-5659
EDUCATION:
B.A., University of California, 1951
Ph.D., University of California, 1960

Tobin, Robert L.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
P.O. Box 810
Meeker, CO 81641
PHONE: 303/878-5086
EDUCATION:
B.S., University of California-Los Angeles, 1968, Geology

Tompkins, Michael A.

Senior Scientist
U.S. Department of Energy
Lawrence Livermore Laboratory
Environmental Sciences Division
P.O. Box 808, L-453
Livermore, CA 94550
PHONE: 415/422-0902 FTS: 532-0902
EDUCATION:
B.A., University of South Florida, 1973, Chemistry
Ph.D., University of South Florida, 1977, Analytical Chemistry

Tooley, John E.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
1745 West 1700 South, Room 1098
Salt Lake City, UT 84104
PHONE: 801/524-5654
EDUCATION:
B.S., Louisiana State University, 1974, Engineering/Agriculture

Torpy, Michael F.

Environmental Systems Engineer
U.S. Department of Energy
Argonne National Laboratory
Energy and Environmental Systems Division
Building 12
Argonne, IL 60439
PHONE: 312/972-3268 FTS: 972-3268
EDUCATION:
B.A., Montana State University, 1970, Microbiology
M.S., Utah State University, 1975, Water Quality Engineering
Ph.D., Utah State University, 1978, Water Resources Engineering

Traylor, Frank A.

Executive Director
State of Colorado
Colorado Department of Health
4210 East 11th Avenue
Denver, CO 80220
PHONE: 303/320-8333
EDUCATION:
B.A., Princeton University, 1951, Pre-med
M.D., Washington University, 1955, Medicine

Treese, Christopher

Assistant Research Associate
University of Denver
Denver Research Institute
Industrial Economics Division
Denver, CO 80208
PHONE: 303/753-2351
EDUCATION:
B.A., Colorado College, 1978, Economics

Tucker, Roger A.

Environmental Scientist/Meteorologist
U.S. Department of Interior
U.S. Geological Survey
Area Oil Shale Office
131 North 6th, Suite 300
Grand Junction, CO 81501
PHONE: 303/245-6700 FTS: 322-0281
EDUCATION:
B.A., Aurora College, 1961

Tundermann, David W.

Director
U.S. Environmental Protection Agency
Office of Planning and Evaluation
Office of Planning and Management
Policy Planning Division
401 M Street, S.W.
PM-221
Washington, DC 20460
PHONE: 202/755-0924 FTS: 755-0924
EDUCATION:
A.B., Princeton University, 1968, Government/Economics
J.D., Yale University, 1972, Law

Utter, Stephen

Research Supervisor
U.S. Department of Interior
Bureau of Mines
Denver Mining Research Center
Denver Federal Center
Building 20
Denver, CO 80225
PHONE: 303/234-3848 FTS: 234-3848
EDUCATION:
B.S., University of Idaho, 1942, Mining Engineering

VanDerwalker, John G.

Team Leader
U.S. Department of Interior
U.S. Fish and Wildlife Service
Western Energy and Land Use Team
Office of Biologic Sciences
2625 Redwing Road
Fort Collins, CO 80526
PHONE: 303/223-2040
EDUCATION:
B.S., Colorado State University, 1958, Zoology

Veers, Val R.

Associate Professor
Colorado College
Department of Physics
Colorado Springs, CO 80907
PHONE: 303/473-2233x305
EDUCATION:
B.S., Case Institute of Technology, 1964, Physics
Ph.D., Illinois Institute of Technology, 1969, Physics

Vegella, Thomas

Industrial Hygienist
U.S. Public Health Service
National Institute for Occupational
Safety and Health
Environmental Investigations Branch
Center for Disease Control
944 Chestnut Ridge Road
Morgantown, WV 26505
PHONE: 304/599-7203 FTS: 923-7203
EDUCATION:
B.S., Merrimack College, 1969, Chemistry
M.S., Central Missouri State College, 1978,
Industrial Hygiene

Virgona, Joseph E.

Chemical Engineer
U.S. Department of Energy
Laramie Energy Technology Center
Oil Shale Projects
Special Projects Office
2784 Crossroads Boulevard
Room 110
Grand Junction, CO 81501
PHONE: 303/245-1632
EDUCATION:
B.S., New Jersey Institute of Technology, 1969,
Chemical Engineering
M.S., New Jersey Institute of Technology, 1971,
Chemical Engineering

Voelz, M.D., George L.

Health Division Leader
U.S. Department of Energy
Los Alamos Scientific Laboratory
P.O. Box 1663
Los Alamos, NM 87545
PHONE: 505/667-4218 FTS: 843-4218
EDUCATION:
B.S., University of Wisconsin, 1948
M.D., University of Wisconsin, 1955

Waesche, Ken

Geologist
State of Colorado
Colorado Department of Health
Radiation and Hazardous Wastes
Control Division
1101 Bellaire
Denver, CO 80220
PHONE: 303/320-8333
EDUCATION:
B.S., University of Tennessee, 1973, Geology

Wagner, Martin

Chief
U.S. Environmental Protection Agency
Office of Planning and Management
Office of Planning Evaluation
Policy Planning Division
Energy Policy Branch
401 M Street, S.W.
PM-221, Room 415
Washington, DC 20460
PHONE: 202/755-4803 FTS: 755-4803
EDUCATION:
B.S.E., Princeton University, 1969, Aeronautical
Engineering
M.S.E., Princeton University, 1972, Aeronautical
Engineering
M.P.A., Princeton University, 1975, Public
Administration

Wagner, Paul

Staff Member/Principal Investigator
U.S. Department of Energy
Los Alamos Scientific Laboratory
Oil Shale Program
MS-734
Los Alamos, NM 87545
PHONE: 505/667-4923 FTS: 843-4923
EDUCATION:
B.A., State University of New York-Albany, 1947,
Mathematics
M.A., State University of New York-Albany, 1948,
Chemistry
Ph.D., University of Rochester, 1952, Physical
Chemistry

Wagner, William W.

Air Quality Specialist
U.S. Department of Interior
Bureau of Land Management
Division of Resources
136 East South Temple
Salt Lake City, UT 84111
PHONE: 801/524-4033 FTS: 588-4033
EDUCATION:
B.S., Utah State University, 1953, Agronomy
M.S., Utah State University, 1960, Agronomy
Ph.D., University of Utah, 1972, Radiation
Biology

Wallace, John R.

Research Chemist
University of Denver
Denver Research Institute
Chemical Division
Denver, CO 80208
PHONE: 303/753-2911
EDUCATION:
B.S., University of California-Berkeley, 1969,
Chemistry/Physics
Ph.D., University of Illinois, 1974, Chemistry

Wallum, P.E., Arden

Supervisor, NPDES Permit Program
State of Colorado
Colorado Department of Health
Water Quality Control Division
4210 East 11th Avenue
Denver, CO 80220
PHONE: 303/320-8333x3231
EDUCATION:
B.S., South Dakota State University, 1972, Civil Engineering
M.S., South Dakota State University, 1973, Civil Engineering

Walsh, Robert T.

Assistant to Director
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Emission Standards and Engineering Division
MS-13
Research Triangle Park, NC 27711
PHONE: 919/541-5331 FTS: 541-5331
EDUCATION:
B.S., San Diego State College, 1950, Chemical Engineering

Walter, David J.

Assistant District Manager
U.S. Department of Interior
Bureau of Land Management
P.O. Box 248
Craig, CO 81625
PHONE: 303/824-3417
EDUCATION:
B.S., University of Montana, 1964, Forest and Range Management

Wanek, Patsy Lee

Chemical Technician
U.S. Department of Energy
Los Alamos Scientific Laboratory
MS-734
Los Alamos, NM 87545
PHONE: 505/667-2081 FTS: 843-2081
EDUCATION:
B.A., Sacramento State College, 1963

Ward, Raymond L.

Chemist
U.S. Department of Energy
Lawrence Livermore Laboratory
Oil Shale Project
P.O. Box 808, L-207
Livermore, CA 94550
PHONE: 415/422-6308 FTS: 532-6308
EDUCATION:
B.S., University of California-Berkeley, 1953, Chemistry
Ph.D., Washington University, 1956, Physical Chemistry

Watkins, J. Wade

Associate Deputy Assistant Secretary
U.S. Department of Energy
Office of Fossil Energy
Oil, Gas, and Shale Technology
D-107
Washington, DC 20545
PHONE: 301/353-2700 FTS: 233-2700
EDUCATION:
B.S., Wichita State University, 1938, Science

Weaver, Glen D.

Associate Professor of Geography
Colorado State University
Department of Economics
Fort Collins, CO 80523
PHONE: 303/491-5452
EDUCATION:
B.A., Kent State University, 1959, Geography
M.A., Kent State University, 1961, Geography
Ph.D., Johns Hopkins University, 1973, Geography

Webb, Kenneth W.

Supervisory Engineer
State of Colorado
Colorado Department of Health
4210 East 11th Avenue
Denver, CO 80220
PHONE: 303/320-8333
EDUCATION:
B.S., University of Oklahoma, 1942
M.S., University of Denver, 1975

Weber, James

Assistant Director for Research and Development
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2208 FTS: 328-4208
EDUCATION:
B.S., Regis College, 1959, Chemistry
M.A., University of Denver, 1961, Chemistry
Ph.D., Kansas State University, 1965, Chemistry

Welder, Frank A.

Hydrologist
U.S. Department of Interior
U.S. Geological Survey
Water Resources Division
P.O. Box 810
Meeker, CO 81041
PHONE: 303/878-5086
EDUCATION:
B.S., University of Texas, 1949, Geology
M.S., Louisiana State University, 1951, Geology
Ph.D., Louisiana State University, 1955, Geology

Welty, Carl

Supervisory Physical Scientist
U.S. Department of Energy
Office of Environment
Division of Operational and
Environmental Safety
Washington, DC 20545
PHONE: 301/353-5642 FTS: 233-5642
EDUCATION:
B.S., University of Wyoming, 1952, Biology
M.S., University of Rochester, 1956,
Radiobiology
M.S., Harvard University, 1957, Industrial
Hygiene and Toxicology

Wewerka, Eugene Michael

Group Leader
U.S. Department of Energy
Los Alamos Scientific Laboratory
Environmental Science Group
MS-734
Los Alamos, NM 87545
PHONE: 505/667-3337 FTS: 843-3331
EDUCATION:
B.A., University of Minnesota, 1962
Ph.D., University of Minnesota, 1965

Wheeler, P.E., Robert W.

Industrial Hygiene Engineer
U.S. Public Health Service
National Institute for Occupational
Safety and Health
Respiratory Disease Studies
Center for Disease Control
944 Chestnut Ridge Road
Morgantown, WV 26505
PHONE: 304/599-7421 FTS: 923-7421
EDUCATION:
B.S., West Virginia University, 1965, Civil
Engineering
M.S., West Virginia University, 1967, Civil
Engineering
M.P.H., Harvard University, 1978, Public Health

Whittlesey, Norman K.

Professor
Washington State University
Department of Agricultural Economics
Pullman, WA 99163
PHONE: 509/335-1809 FTS: 445-1809
EDUCATION:
B.S., Colorado State University, 1955
M.S., Colorado State University, 1960
Ph.D., Iowa State University, 1964

Wieber, Paul R.

Chief
U.S. Department of Energy
Office of Fossil Energy
Program Development Branch
D-107
Washington, DC 20545
PHONE: 301/353-2729 FTS: 233-2729
EDUCATION:
B.S., Case Institute of Technology, 1957,
Chemical Engineering
M.Sc., Case Institute of Technology, 1962,
Chemical Engineering
Ph.D., University of Toledo, 1973, Engineering
Science

Wildeman, Thomas R.

Associate Professor
Colorado School of Mines
Department of Chemistry and
Geochemistry
Golden, CO 80401
PHONE: 303/279-0300x642
EDUCATION:
B.S., College of Saint Thomas, 1962, Chemistry
Ph.D., University of Wisconsin, 1967, Physical
Chemistry

Wildung, Raymond E.

Manager
U.S. Department of Energy
Pacific Northwest Laboratories
Environmental Chemistry
Battelle Boulevard
Richland, WA 99352
PHONE: 509/942-5680 FTS: 444-5680
EDUCATION:
B.S., California State Polytechnic University,
1962
M.S., University of Wisconsin, 1965
Ph.D., University of Wisconsin, 1967

Wilkerson, Connie Lewis

Research Scientist
U.S. Department of Energy
Pacific Northwest Laboratories
Physical Sciences Department
Earth and Planetary Section
Battelle Boulevard
Richland, WA 99352
PHONE: 509/942-3940 FTS: 444-3949
EDUCATION:
B.S., Oklahoma State University, 1975,
Engineering Technology

Williams, Joel M.

Staff Member
U.S. Department of Energy
Los Alamos Scientific Laboratory
MS-734
Los Alamos, NM 87545
PHONE: 505/667-7887 FTS: 843-7887
EDUCATION:
B.A., College of William and Mary, 1962
Ph.D., Northwestern University, 1966

Williams, Ralph E.

Senior Research Geochemist
and Associate Division Head
University of Denver
Denver Research Institute
Laboratories for Applied Mechanics
Denver, CO 80208
PHONE: 303/753-2616
EDUCATION:
B.A., University of Colorado, 1959, Geology
B.S., University of Denver, 1965, Chemistry
M.S., University of Denver, 1970, Chemical Engineering

Williams, Ted

Director
U.S. Department of Energy
Office of Environment
Office of Technology Impacts
Policy Analysis Division
1000 Independence Avenue, S.W.
Room 4G-025 (EV-21)
Washington, DC 20585
PHONE: 202/252-4760 FTS: 252-4760
EDUCATION:
B.A., Bowdoin College, 1957, Physics
M.S., Michigan State University, 1959, Mathematics

Witschi, Hanspeter

Senior Research Staff Member
U.S. Department of Energy
Oak Ridge National Laboratory
Biology, Cancer, and Toxicology Program
P.O. Box Y
Oak Ridge, TN 37830
PHONE: 615/574-0801 FTS: 624-0801
EDUCATION:
M.D., University of Berne, 1963, Medicine

Wood, Randolph

Administrator
State of Wyoming
Department of Environmental Quality
Air Quality Division
Hathaway Office Building
Cheyenne, WY 82001
PHONE: 307/777-7391 FTS: 328-9391
EDUCATION:
B.S.A.E., University of Texas, 1963
M.S.M.E., Southern Methodist University, 1970

Yeatts, Jr., LeRoy B.

Chemist
U.S. Department of Energy
Oak Ridge National Laboratory
Building 4500S, Room E-160
P.O. Box X
Oak Ridge, TN 37830
PHONE: 615/574-4863 FTS: 624-4863
EDUCATION:
Ph.D., Cornell University, 1948

Yesavage, Victor F.

Associate Professor
Colorado School of Mines
Department of Chemical Engineering
Golden, CO 80401
PHONE: 303/279-0300x2725
EDUCATION:
B.Ch.E., Cooper Union, 1963, Chemical Engineering
M.S.E., University of Michigan, 1964, Chemical Engineering
Ph.D., University of Michigan, 1968, Chemical Engineering

Youngberg, Alv Dan

Research Geologist
U.S. Department of Energy
Laramie Energy Technology Center
Box 3395 University Station
Laramie, WY 82071
PHONE: 307/721-2262 FTS: 328-4262
EDUCATION:
B.S., University of California-Berkeley, 1961
M.S., Brigham Young University, 1966, Botany/Geology

Zachara, John M.

Research Scientist
U.S. Department of Energy
Pacific Northwest Laboratories
Ecological Science Department
Environmental Chemistry Section
Battelle Boulevard
Richland, WA 99352
PHONE: 509/375-2993 FTS: 375-2993
EDUCATION:
B.S., Bucknell University, 1973, Chemistry
M.S., University of Washington, 1978, Soil Chemistry

Zeigler, Timothy W.

Chief
U.S. Department of Energy
Carbondale Mining Technology Center
Non-Coal Mining Branch
P.O. Box 2587
Carbondale, IL 62901
PHONE: 618/985-3771
EDUCATION:
B.S., University of Illinois, 1968, Civil Engineering
M.S., University of Illinois, 1969, Civil Engineering

Zielinski, Jr., Walter L.

Air Program Manager
U.S. Department of Commerce
U.S. National Bureau of Standards
Office of Environmental Measurements
Washington, DC 20234
PHONE: 301/921-3775 FTS: 921-3775
EDUCATION:
B.S., Wagner College, 1954, Chemistry
M.S., North Carolina State University, 1959, Biochemistry
Ph.D., Georgetown University, 1972, Analytical Chemistry

Zukor, Stephen H.

Chemical Engineer
U.S. Department of Energy
Office of Resource Applications
12th & Pennsylvania, N.W.
MS-3344
Washington, DC 20461
PHONE: 202/633-8644 FTS: 633-8644
EDUCATION:
B.S., University of Florida, 1969, Chemical Engineering
M.S., George Washington University, 1975, Administration

LOCAL GOVERNMENT DIRECTORY

Aex, Paul

Team Leader
Northwest Mental Health in Rio Blanco County
267 6th Street
Meeker, CO 81641
PHONE: 303/878-5112
EDUCATION:
B.S., Westminster College, 1965, Sociology
M.Sw., University of Illinois, 1973, Social Work

Albers, Maxine

County Commissioner
Mesa County
P.O. Box 897
Grand Junction, CO 81501
PHONE: 303/243-9200x201

Baldwin, Ray

Planning Director
Garfield County
2014 Blake Avenue
Glenwood Springs, CO 81601
PHONE: 303/945-8212
EDUCATION:
B.S., Colorado State University, 1971, Civil Engineering

Batt, Ron

President, Chamber of Commerce
Store Manager
Safeway Stores
1295 West Victory Way
Craig, CO 81625
PHONE: 303/824-9497

Beard, William L.

Assistant City Manager
City of Rangely
Box 580
Rangely, CO 81648
PHONE: 303/675-8611

Bentrott, Jerry

Assistant City Administrator
City of Craig
300 West 4th Street
Craig, CO 81625
PHONE: 303/824-5897
EDUCATION:
B.A., University of Iowa, 1970, Economics/Political Science
M.P.A., University of Colorado, 1976, Public Administration

Bordson, Mark

Extension Agent
Rio Blanco County
Youth and Community Development
Box 580
Rangely, CO 81648
PHONE: 303/675-2417
EDUCATION:
B.S., Montana State University, 1966, Entomology
M.S., Southern Illinois University, 1972, Community Development

Brand, Annette A.

Town Administrator
City of Silt
P.O. Box 174
Silt, CO 81652
PHONE: 303/876-2353

Brennan, C. W.

Rancher
Piceance Route
Rifle, CO 81650
PHONE: 303/878-4763

Campbell, Jerri

Deputy Planner
Moffat County
221 West Victory Way
Craig, CO 81625
PHONE: 303/824-8221

Carpenter, Sr., Joe R.

Former Mayor Pro Tem of Rifle
City of Rifle
P.O. Box 1061
Rifle, CO 81650
PHONE: 303/625-2000

Cerise, Flaven

County Commissioner
Garfield County
Box M
Carbondale, CO 81623
PHONE: 303/963-2634

Choate, Vicki

Chairman
City of Rifle
Housing Authority
216 West 16th Street
Rifle, CO 81650
PHONE: 303/625-1357
EDUCATION:
B.A., Western State College of Colorado, 1963, Accounting & Business Administration
M.A., Western State College of Colorado, 1968, Business Administration & Accounting

Clark, Daniel

Superintendent
Garfield County
School District RE-1
822 East Avenue
Rifle, CO 81650
PHONE: 303/625-1595
EDUCATION:
B.A., University of Denver, 1950, Education/History
M.A., University of Northern Colorado, 1960, Education Administration

Collins, Kay

Conservation Specialist
City of Denver
Denver Public Library
Regional Energy/Environment Information Center
1357 Broadway
Denver, CO 80203
PHONE: 303/837-5994 FTS: 327-5994
EDUCATION:
B.A., University of New Mexico, 1964, History
M.A., University of New Mexico, 1965, History
M.L.S., University of Denver, 1967, Library Science

Cook, Elmo A.

Minister
United Methodist Church
809 Park Street
Meeker, CO 81641
PHONE: 303/878-5904
EDUCATION:
B.A., North Central College, 1949, Geology/Psychology
B.D., St. Paul's School of Theology, 1973, Theology

Cooper, Donald B.

City Administrator
City of Craig
300 West 4th Street
Craig, CO 81625
PHONE: 303/824-5897
EDUCATION:
M.P.A., University of Colorado, 1976, Public Administration

Copeland, Thomas W.

City of Palisade
139 Victoria Drive
Palisade, CO 81526
PHONE: 303/464-5515

Demos, Bob

Director
Colorado West Area Council of Governments
P.O. Box 351
Rifle, CO 81650
PHONE: 303/625-1723
EDUCATION:
B.A., University of South Dakota, 1970, Sociology

Deppe, Daniel W.

City Manager
City of Rifle
P.O. Box 1908
Rifle, CO 81650
PHONE: 303/625-2121

Downer, Wallace G.

Mayor
City of Fruita
539 Pabor
Fruita, CO 81521
PHONE: 303/858-7808

Enstrom, Rick

County Commissioner
Mesa County
Board of Commissioners
P.O. Box 897
Grand Junction, CO 81501
PHONE: 303/243-9200
EDUCATION:
B.A., Mesa College, 1976, Selected Studies

Flewelling, Richard A.

City Manager
City of Carbondale
76 South 2nd
Carbondale, CO 81623
PHONE: 303/963-2733

Fuller, Jr., Frank

Director
Western Garfield County Community Education Center
Colorado Mountain College
703 Railroad Avenue
Rifle, CO 81650
PHONE: 303/625-1871
EDUCATION:
B.A., MacMurray College, 1968, History/English
M.Ed., North Texas State University, 1974, Continuing Education Administration

George, Robert D.

Program Director
Uinta Basin Association
of Governments
Water Quality
P.O. Box 1449
Roosevelt, UT 84066
PHONE: 801/722-4518
EDUCATION:
B.S., Utah State University, 1976

Hartzler, Harvey

Administrator
Memorial Hospital
785 Russell
Craig, CO 81625
PHONE: 303/824-9411
EDUCATION:
B.S., Goshen College, 1962, Nursing
M.S., University of Colorado, 1965, Nursing
M.S., University of Colorado, 1972, Health Administration

Heitman, Ronald L.

Regional Planner
Uinta Basin Association
of Governments
P.O. Box 1449
Roosevelt, UT 84066
PHONE: 801/722-4518
EDUCATION:
B.S., Mankato State University, 1977, Geography

Hollingsworth, Dale

Executive Director
Grand Junction Area
Chamber of Commerce
Box 1330
Grand Junction, CO 81501
PHONE: 303/242-3214

Holmgren, Charles

Team Leader
Colorado West Regional Mental
Health Center
Craig Office
657 Yampa Avenue
Craig, CO 81625
PHONE: 303/824-5600
EDUCATION:
B.A., Ogsburg College, 1957, History
M.A., Lutheran School of Theology, 1961, Divinity

Hughes, Constance M.

County Health Nurse
Rio Blanco County
Box 1047 County Courthouse
Meeker, CO 81641
PHONE: 303/878-5285

Humble, Warren

Psychologist
SOPRIS Mental Health Center
P.O. Box 1627
Rifle, CO 81650
PHONE: 303/625-3582
EDUCATION:
B.A., Colorado State University, 1974, Sociology/Psychology
M.A., University of Colorado, 1978, Counseling Psychology

Johnson, John W.

Deputy Director
Community Development Planner
Colorado West Area Council
of Governments
P.O. Box 351
Rifle, CO 81650
PHONE: 303/625-1723
EDUCATION:
B.A., University of Iowa, 1971, Business Administration
M.S., University of Iowa, 1973, Urban and Regional Planning

Johnson, Ronald R.

Director
Garfield County
Department of Social Services
P.O. Box 580
Glenwood Springs, CO 81601
PHONE: 303/945-9191
EDUCATION:
B.A., University of Colorado, 1965, Political Science/Public Administration

Jolley, Richard

County Commissioner
Garfield County
Elk Creek
New Castle, CO 81647
PHONE: 303/984-2257

Kelly, Wayne

Superintendent
Rangely Public Schools
Box 928
Rangely, CO 81648
PHONE: 303/675-8997
EDUCATION:
B.S., Southwestern State College, 1954, Industrial Arts/Social Studies
M.A., Adams State College, 1965, Psychology & Guidance

King, Robert

Superintendent
Meeker County
School District RE-1
Box 1089
Meeker, CO 81641
PHONE: 303/878-5752
EDUCATION:
B.A., Adams State College, 1952, English/Education
M.A., Adams State College, 1955, School Administration

Kring, R. Lynn

Water Quality Coordinator
Colorado West Area Council of Governments
P.O. Box 351
Rifle, CO 81650
PHONE: 303/625-1723
EDUCATION:
B.S., University of Kansas, 1972, Systematics & Ecology
M.S., University of Kansas, 1974, Aquatic Ecology

Kubin, Laurel

Extension Agent
Rio Blanco County
Family Living
Box 270
Meeker, CO 81641
PHONE: 303/878-5682
EDUCATION:
B.A., Colorado State University, 1971, Home Economics
M.A., Oregon State University, 1978, Home Economics

LeFevre, Tom

County Commissioner
Moffatt County
221 West Victory Way
Craig, CO 81625
PHONE: 303/824-5517

Lollar, Cecil E.

Mayor
City of Rangely
120 Weber Street
Rangely, CO 81648
PHONE: 303/675-2251
EDUCATION:
B.A., Adams State College, 1960, Education
M.A., Adams State College, 1961, Education
J.D., University of Tulsa, 1967, Law
M.A., Adams State College, 1968, Psychology/Guidance

Macy, John

Marshall
City of Silt
P.O. Box 174
Silt, CO 81652
PHONE: 303/876-2735

Mattivi, Pete

Mayor
City of New Castle
New Castle, CO 81647
PHONE: 303/984-2366

McDaniel, Floyd E.

Mayor
City of Grand Valley
P.O. Box 188
Grand Valley, CO 81635
PHONE: 303/285-7786
EDUCATION:
B.S., Madison College, 1953, Business Administration and Secondary Education

McDaniel, Russell

Administrator
Pioneer's Hospital
345 Cleveland Street
Meeker, CO 81641
PHONE: 303/878-5047
EDUCATION:
B.A., Western State College of Colorado, 1962, Accounting
M.A., Western State College of Colorado, 1964, Accounting

Merkel, Lee D.

Planning Director
City of Rifle
P.O. Box 1908
Rifle, CO 81650
PHONE: 303/625-2121
EDUCATION:
B.A., Wittenberg University, 1972, Political Science
M.P.A., University of Colorado, 1977, Urban Administration

Meyer, Kelly

President
Kelly's Chevrolet-Cadillac Inc.
139 West Third
Rifle, CO 81650
PHONE: 303/625-2387
EDUCATION:
B.A., Central Missouri State College, 1951, Physical Education

Mitchell, George E.

Mayor
City of Rifle
404 Hutton Avenue
Rifle, CO 81560
PHONE: 303/625-1346

Murray, Thomas M.

Socioeconomist
Uinta Basin Association
of Governments
Energy Planning Office
Uintah County Courthouse
Room 104
Vernal, UT 84078
PHONE: 801/789-2300 FTS: 789-4453
EDUCATION:
B.S., Utah State University, 1979, Sociology

Nall, Gary

Chairman
Moffat County
Parks and Recreation Committee
665 Colorado Street
Craig, CO 81625
PHONE: 303/824-8506

Pankonin, P.E., Jim

Planning Director
Moffat County
221 West Victory Way
Craig, CO 81625
PHONE: 303/824-8221
EDUCATION:
B.S., Colorado State University, 1974, Civil Engineering

Peercy, Dorothy

Retired
P.O. Box 803
Rifle, CO 81650
PHONE: 303/625-2109
EDUCATION:
B.M., University of Colorado, 1957, Music

Penlend, Patty

Director
Garfield County Youth Services
P.O. Box 1627
Rifle, CO 81650
PHONE: 303/625-3141
EDUCATION:
B.A., Louisiana State University, 1971, Anthropology
M.P.A., University of Colorado, 1978, Public Administration

Rains, Charles A.

Minister
United Church of Christ
Box 395
Silt, CO 81652
PHONE: 303/876-2106

Rehborg, Duane L.

Director of Development
Impact Coordinator
Rio Blanco County
Planning Department
P.O. Box 599
Meeker, CO 81641
PHONE: 303/878-5081
EDUCATION:
B.S., University of Wisconsin, 1973, Regional Analysis

Schultz, Timothy W.

Chairman of the Board
Rio Blanco County
Piceance Creek Route
Rifle, CO 81650
PHONE: 303/878-5380
EDUCATION:
B.A., Colorado State University, 1972, Political Science

Shelton, Judith Lee

Area Coordinator
Horizons for the Handicapped
Rio Blanco County
820 2nd Street
Meeker, CO 81641
PHONE: 303/878-5234

Sherwin, Hoyt

Minister
First Baptist Church
P.O. Box 699
Rangely, CO 81648
PHONE: 303/675-8778
EDUCATION:
B.A., Ottawa University, 1967, Religion
M.Div., American Baptist Seminary of the West, 1972

Short, Geraldine

Chairman
Rio Blanco County
Council on Aging
P.O. Box 293
Meeker, CO 81641
PHONE: 303/878-5311

Shultz, Claude E.

Mayor
City of Meeker
236 7th Street
Meeker, CO 81641
PHONE: 303/878-5344

Siek, Robert D.

Director
Council of Energy Resource Tribes
Office of Environmental Analysis
5670 South Syracuse Circle
Englewood, CO 80111
PHONE: 303/779-4760
EDUCATION:
B.S., University of Denver, 1957, Chemistry
M.P.H., University of Michigan, 1961, Industrial Toxicology

Sims, Dennis

Councilman
City of Dinosaur
P.O. Box 27
Dinosaur, CO 81610
PHONE: 303/374-2265

Smith, Marian I.

Mayor
City of Glenwood Springs
1332 Grand
Glenwood Springs, CO 81601
PHONE: 303/945-5838

Sorenson, Russ

Assistant County Planner
Moffatt County
221 West Victory Way
Craig, CO 81625
PHONE: 303/824-8221
EDUCATION:
B.S., South Dakota State University, 1976, Landscape Architecture/Geography

Tayyara, Saed

Water and Sewer Department
333 East Victory Way
Craig, CO 81625
PHONE: 303/824-3566
EDUCATION:
B.A., Yampa Valley College, 1968, Government

Thompson, Jerry Leonard

Mayor
City of Craig
801 Stout Street
Craig, CO 81625
PHONE: 303/824-5581
EDUCATION:
B.A., Saint Bernard College, 1962, Business Administration

Trevenen, Claudia

City of Maybell
335 Barkley
Craig, CO 81625
PHONE: 303/824-6903

Velasquez, Larry

County Commissioner
Garfield County
1541 132 Rd
Glenwood Springs, CO 81601
PHONE: 303/945-5560

Wahlberg, Carl

Vice President
Mesa College
External Affairs
Grand Junction, CO 81501
PHONE: 303/248-1020
EDUCATION:
B.A., University of Denver, 1948, Mathematics
M.A., University of Denver, 1951, Counseling & Guidance
Ph.D., University of Denver, 1968, Education

Wilson, Beverly

Building Director
Craig-Moffatt County Library
Board of Trustees
Baggs Route, Box 50
Craig, CO 81625
PHONE: 303/824-6760

Wright, Helen

Board of Education
School District 51
179 Sunlight
Grand Junction, CO 81503
PHONE: 303/242-6423
EDUCATION:
B.A., University of Northern Colorado, 1955, Elementary Education

Young, Robert

Town Administrator
City of Meeker
P.O. Box 38
Meeker, CO 81641
PHONE: 303/878-5344
EDUCATION:
B.S., University of Colorado, 1973, Sociology

Zastrow, Ronald

Parks and Recreation
Regional Development
124 East Fourth
Rifle, CO 81650
PHONE: 303/625-1850
EDUCATION:
B.S., Colorado State University, 1968, Biological Science
D.D.S., University of Nebraska, 1972

☆ U. S. GOVERNMENT PRINTING OFFICE : 1980 620-228/4088

Government and University Oil Shale Directory

HAVE WE FORGOTTEN YOU?
ARE ANY CHANGES NECESSARY?
DO YOU HAVE ANY COMMENTS?

If so, please fill out the detachable, postage paid card below. The editors thank you.

- -

☐ Addition ☐ Change ☐ Comment **Comments/Instructions**

From:
Name ________________________________

Organization ________________________________

Address ________________________________

____

City, State, Zip ________________________________

Phone ________________________________

☐ Please call me

LD-7

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 811 DENVER, COLORADO

POSTAGE WILL BE PAID BY ADDRESSEE

Editors
Government and University Oil Shale Directory
c/o Chemical Division
Denver Research Institute
Denver, Colorado 80208

LD-8